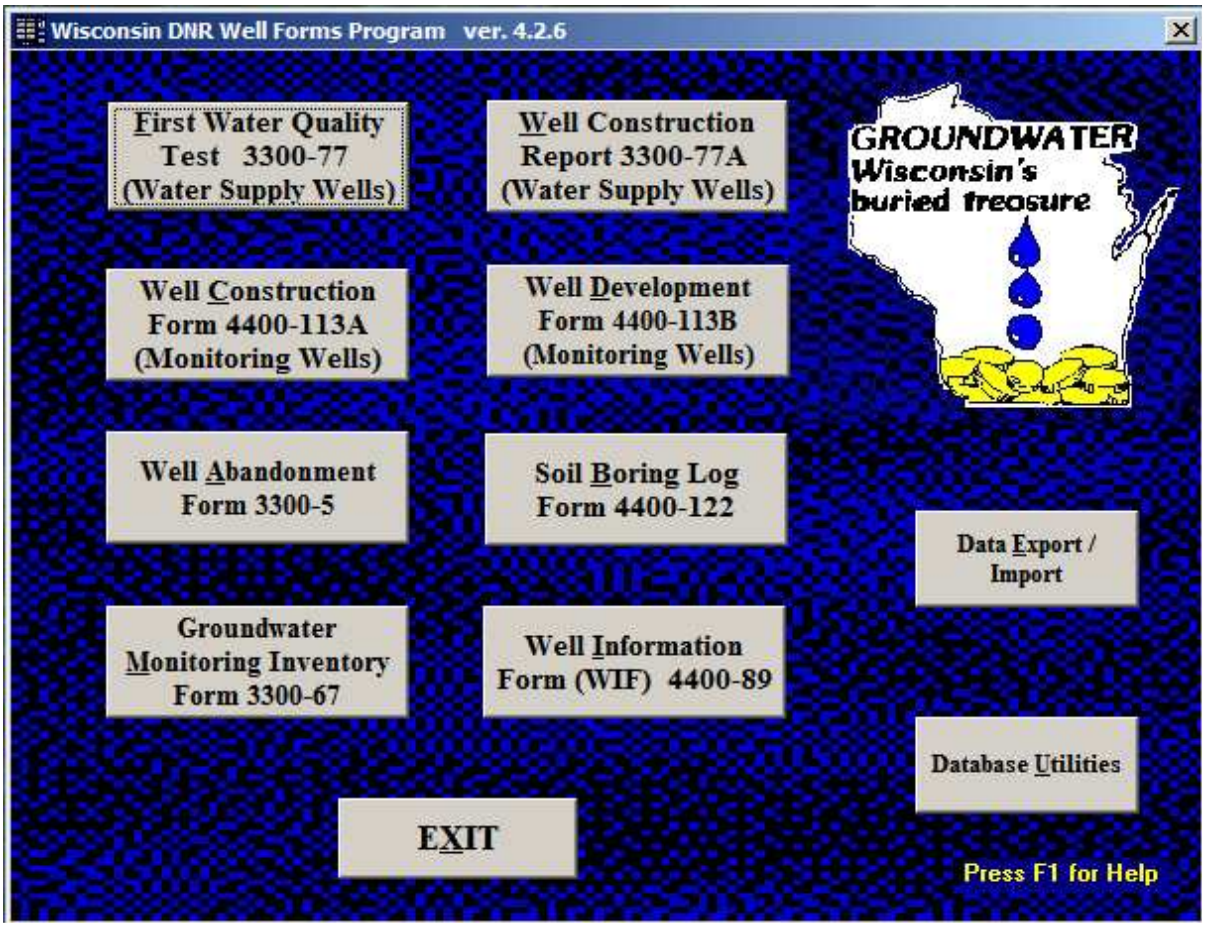
Wisconsin DNR Well Forms Program



Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707-7921
April 2008
Publication DG-065

WISCONSIN DEPT. OF NATURAL RESOURCES

This program is intended to provide a way of electronically capturing well and related information required by the Department on eight specific forms. It also provides a way to print, export, and import data captured through this program. We hope this program provides you with a useful tool to manage your well and related data.

The following document is a recompilation of the help screens available within the program. If you have any questions, problems, or comments, please contact:

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The program software and updates are available on the Groundwater Information website at:

WWW.DNR.STATE.WI.US/ORG/WATER/DWG/GW/SOFTWARE.HTM

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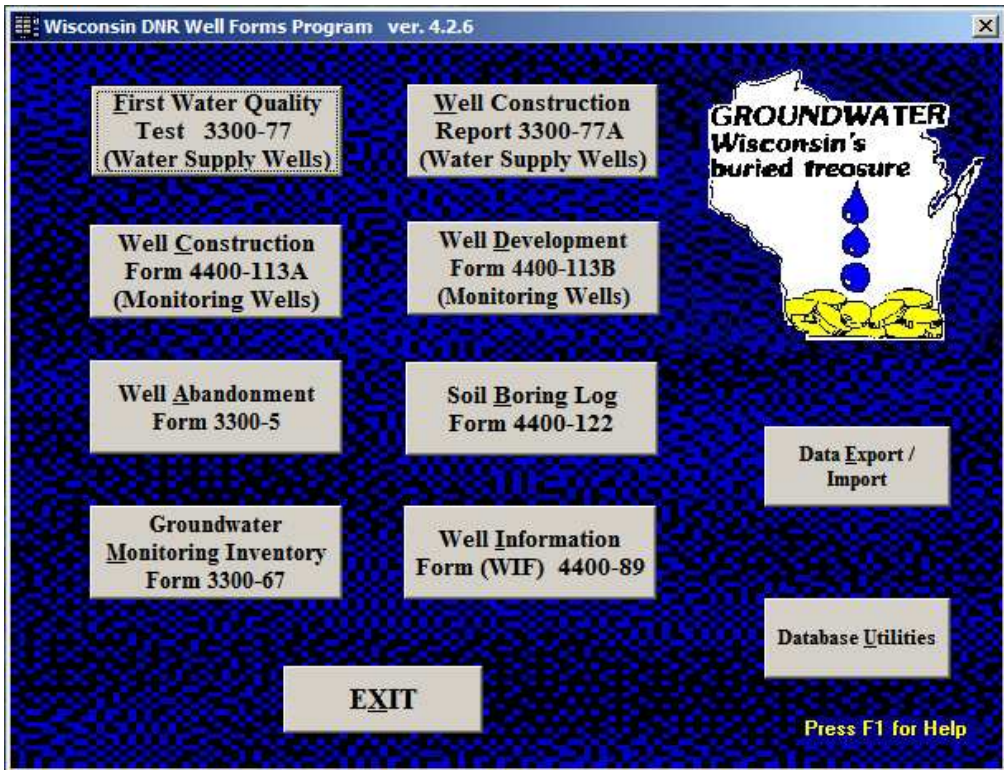
Wisconsin DNR Well Forms Program

PROGRAM INTRODUCTION

The Wisconsin Department of Natural Resources Well Forms Program allows you to build your own electronic database of well information collected from eight (8) DNR well related forms. The program is intended to provide you a way of electronically capturing well and related information required by the Department. It provides a way to print, export, and import data captured through this program for the following Department forms:



1. First Water Quality Test Form 3300-77
2. Drinking Water Well Construction Form 3300-77A
3. Monitoring Well Construction 4400-113A
4. Monitoring Well Development 4400-113B
5. Well/Drillhole/Borehole Abandonment 3300-5B
6. Soil Boring Log Information Form 4400-122 and 122A
7. Groundwater Monitoring Inventory Form 3300-67
8. Groundwater Monitoring Well Information (WIF) Form 4400-89

The program allows you to enter and edit the forms information, print submittal copies of each form, and export and import the data to the Microsoft Access 97 database format used here. Copies of this program can share data using the Data Export/Import feature.

All the forms are closely tied to use of the Wisconsin Unique Well Number (WUWN). WUWNs can be obtained from your DNR project manager for existing wells at Solid Waste and Wastewater sites, from Private Water Supply staff for drinking water supply wells and Groundwater Section Staff for monitoring wells. Not all the forms require the WUWN be entered, but much of the work entering data can be saved if the WUWN is entered. Once an initial record has been entered into the Monitoring Well Construction Form, Soil Boring Log Form, or Groundwater Monitoring Inventory Form using a WUWN, the program will automatically populate all

corresponding data fields in the Well Development, Abandonment, or WIF forms by first entering the same WUWN. This can save significant time during data entry, and prevent extraneous data entry errors from occurring.

A newer program feature adds the ability to copy Property Owner and Well Constructor information from the First Water Quality Test Form to the Drinking Water Well Construction Form when a new record is added in the Drinking Water Well Construction Form and a corresponding WUWN is used from an existing First Water Quality Test record. A message will pop-up asking if you want to copy the corresponding name and address information.

Another newer program enhancement added since the original program release, on the First Water Quality Test, Drinking Water Well Construction, Monitoring Well Construction, Monitoring Well Development, and Soil Boring Log Information forms, is the ability to have the program copy selected fields from the form you are currently viewing to a new form when you select the [Add New Record] button.

We strongly encourage you to send data back in this electronic format using the export option, in addition to the paper copies sent beck to the DNR project manager. As an additional bonus for submitting your well data electronically, a state-wide database is available through the Groundwater Retrieval Network (GRN) data system. By contributing your well information, you can query records for other areas of the state you are interested in at no additional cost. As a second benefit, a listing of mail and e-mail addresses will be assembled to allow for prompt notification of new features, updates, or important informational items.

Minimum System Requirements

1. Pentium 4 Computer 400 mhz or higher clock speed (lower speeds may run very slow)

2. Windows 95, ME, 98, NT, 2000, XP or Vista
   (**note: Windows Vista** has been tested and will work, but an additional program file must be run manually to allow viewing of Help files. See below under Note – Windows Vista.)

3. 10 MB of free hard disk space for the program and data files

4. A mouse

5. A connection to the internet is very helpful for program downloading and updates.

IMPORTANT:

Install the program as the System Administrator or under an Administrative Account.

Note:

Please be aware that if you are installing the program under a specific user account on the PC, the program may only be available to that user unless the program directory is made accessible to all users with read, write and execute privileges.

World Wide Web (Internet) Download - Full Program Installation

The program can be downloaded from the Wisconsin Department of Natural Resources world wide web site at the following address:

Http://www.dnr.state.wi.us/org/water/dwg/gw/software.htm

A. Installing a New Copy of the DNR Well Forms Program on Your PC - 1 File Version

Install the program as the System Administrator or under an Administrative Account.

1. Download the Wisconsin DNR Well Forms Program "GWForms.Exe" or GWForms.Zip to your PC. (Two versions are provided because some web providers filter out .Exe (executable) files from being downloaded because of their malicious potential and the .Zip file format is allowed.)

2. Using Windows Explorer (not Internet Explorer), double click on the GWForms.Exe or GWForms.Zip file icon.

3. In the "Unzip to folder:" window, a default temporary directory name (C:\DNR-TEMP) is displayed to expand the .Exe compressed installation program files into. Using the .Zip format, you must manually type in this temporary directory location above or some other one you well be able to find in step 5 below. You can change the default name, but you should create a temporary directory for this step. This directory should be deleted after the Well Forms Program has been installed successfully.

4. Click the [Unzip] button

5. Using Windows Explorer, navigate to the directory where you extracted the program files under step three (3) and double click on the Setup.Exe file icon. You may need to refresh the display by pressing the [F5] function key before you can see the new temporary directory.

6. Follow the installation program instructions.

7. When the install program has finished, you should have a menu choice under your "Programs" choice menu under the "Start" button menu, titled "Wisconsin DNR Well Forms."

8. You may want to delete the original downloaded file to recover the disk space. The file no longer needed unless you want to install this program on another PC. You should delete the temporary installation directory (C:\DNR-TEMP) to recover this disk space.

Web Download - Program Update 

Http://www.dnr.state.wi.us/org/water/dwg/gw/software/update.htm

1. After you have downloaded the Version#.Exe or Version#.Zip (Version# meaning the most current update version number) program file from the web, unzip the file by double clicking on the file icon from the Windows Explorer of File Manager menu screen.

2. The Unzip program will run and an Unzip file to: window will be displayed. The default installation directory will be displayed. If you installed the program in another directory (other then

the default C:\Program Files\GW-Forms\) choose the disk drive and directory where the DNR Well Forms Program is currently installed.

3. Click the [Unzip] button

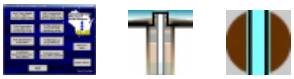
4. You may want to delete the original downloaded file to recover the disk space. This file is no longer needed unless you want to update a copy of this program on another PC.

Note:

If you are using Windows NT 4.0 and have system files that are earlier than Service Pack 2, you will be required to reboot your machine after the program updates some files. If you need Administrative Authority to overwrite these files, you may need to call in your network administrator to complete the install.

Note: Desktop Icon

The program does not install a desktop icon on your system during the installation process. A program selection choice is installed under the "Start" buton - under the "Programs" selection. If you would like a desktop icon, you must install that after the fact. The program has a default icon associated with it. The download file also contains three (3) different icons to select from for this purpose.



A desktop program icon can be installed by:

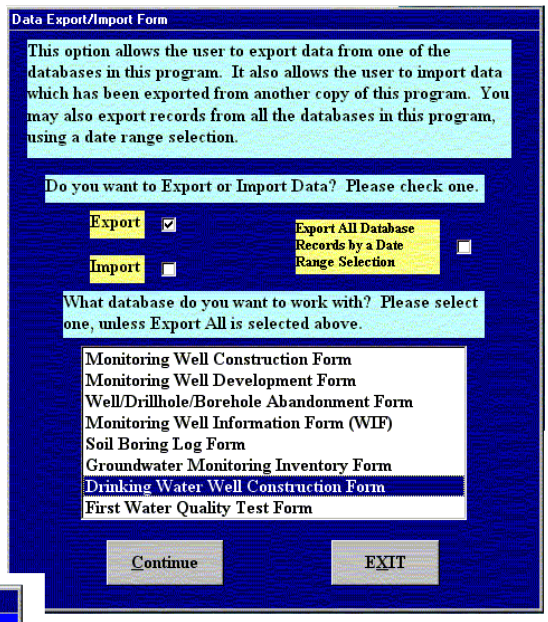
1. **Right click on a blank area of the desktop screen and select New then select Shortcut. Fill out the remaining info. or make the appropiate selections to pick one of the above icons from the program directory. The program is normally installed in the C:\Program Files\GW-Forms directory.**

Program Operation

The program operates very simply with the use of a mouse and the Tab key. Using the mouse, click on the large selection buttons to enter each section of the program. While entering data into the form screens, the Tab key is used to move from one field to the next. Using the mouse and clicking on a field will also move to that field. Drop down boxes provide code choices and date fields have a calendar available by clicking on the square box to the right of the displayed date.

Exporting Data

The Data Export/Import option allows you to export data based on a variety of selection choices. Data records can be exported from any single form using one of the five unique selection criteria, or exported from all forms based on a date range selection. Exporting all records, by a date range selection, exports records from every form related database, based on the file maintenance date. The file maintenance date is added to each record after entry is completed on a new record or after editing an existing record. This option is available by selecting the "Export All Databases by a Date Range Selection" check box.

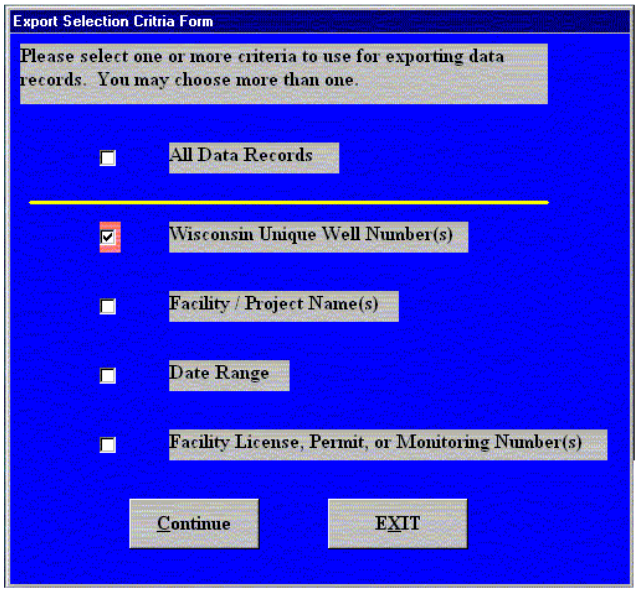


Any or all database records from any one of the eight specific forms used in the program can be exported using the All selection, or records can be selected by using one of the other four (4) selection criteria as shown below:

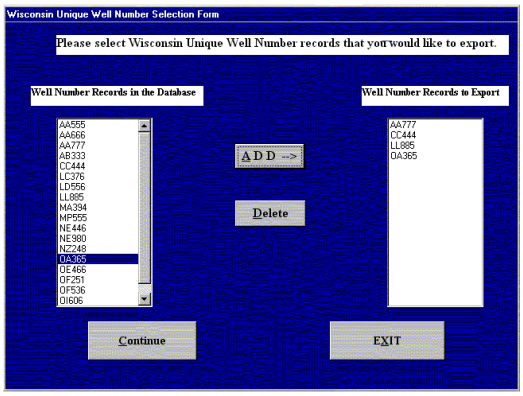
*All

OR

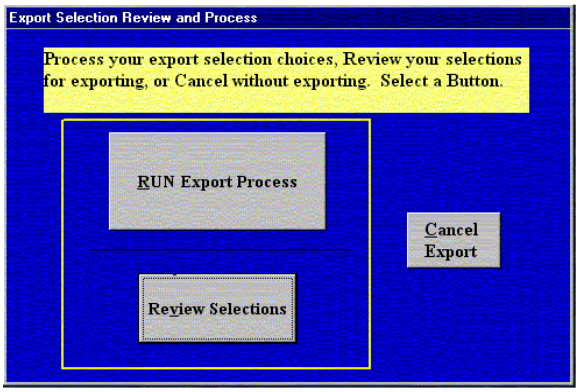
* Wisconsin Unique Well Number
* Facility Name
* Date
* Facility License/Permit/Monitoring ID Number



The All selection requires entry of a date range. The export selects records based on a specific date field in each form and NOT the file maintenance date on each record. Other selections are made by clicking from the list of available values or choosing dates from a pop-up calendar. Selected records are then exported to an external Microsoft Access database file.

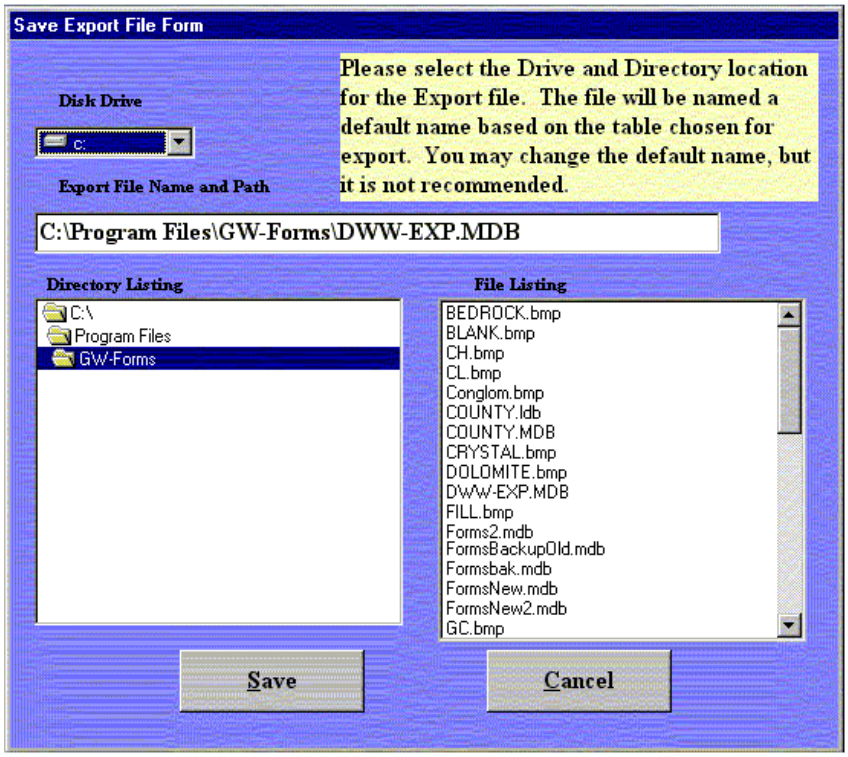


Once selections have been made, you can run the export, review selections, or cancel the export. When your export selections have been run you can select the location where you want the exported database file to be saved.



The program provides a default name for your convenience, but this name can be changed. It may be more difficult to keep track of your export files when the default name is changed. If a file name already exists, you will be asked if you want to overwrite it. If you don't want to overwrite an existing exported file, you must change the name or cancel the export.

Database records exported from this or another copy of this program can be imported back into this package. Data can be exchanged between copies of this program using the Export/Import Data option.



Note:

One of the export selection options must be used to send well records back to the Department.

Importing Data

Database records which were exported from a copy of this program can be imported back into the program using the Data Export/Import option. This feature allows data sharing between copies of this program.

Navigating Within the Edit/Entry Screens

Figure - 1 Navigation Bar

Each entry/edit screen for the six forms has the same navigation bar across the top of the screen. There are eight (8) functions available. **EXIT**, exits the current form edit/entry screen back to the main program menu. **Add New Record**, creates a new blank record for entering new data records into the program. On the Groundwater Well Information Form 4400-89, you can create new associated well records or enter a totally new facility and the associated well records. On most of the forms you will also be asked if you want to copy selected fields from the current record you are viewing. **Edit Record**, edits the current displayed record and performs the edit checks when saved. It is very important that you always choose the Edit option when editing data. The Record Bar allows you to move a single record one way or jump to either end of the database. It also displays the current record number and the total number of records. **Print Record**, allows you to print a single copy of the currently displayed form to the printer. **Delete Record**, allows you to delete the currently displayed record. On the Drinking Water Well Construction Form 3300-77A, Soil Boring Log Form 4400-122 and Groundwater Well Information Form 4400-89, you can choose to delete the record and all it's related records, or only one single related record at a time. **Help**, displays the instructions for the currently displayed form. It also allows you access to the Help System. Help can also be accesses by pressing the F1 function key. **Find a Well**, allows you to locate a record in the database using one of up to five (5) different data fields to search on. Only one field may be used for searching each time. After a first record is found the button can be clicked again to search for the next occurrence. Several of these options will be discussed in more detail later.

Range Value Checks and Special Field Formatting

Many of the data entry fields have range value checks or special entry formats that allow only certain values ranges for numeric fields, or special character sequences for text fields. One such field is the Wisconsin Unique Well Number field which only allows a 2 alphabetic and 3 numeric character sequence to be entered.

Important Editing Information

A new program enhancement added since the original program release, on the First Water Quality Test, Drinking Water Well Construction, Monitoring Well Construction, Monitoring Well Development, and Soil Boring Log Information forms, gives users the capability to have the program copy selected common fields from the record you are currently viewing to a new record when you select the [Add New Record] button. Where several wells or boring were installed with very similar information, this new feature can reduce repetitive data entry. When using this new feature, please check all information carefully before saving it. The following is a list of fields the program will copy into the new record:

First Water Quality Test Form: Only the Well Constructor information (Business Name, License, Address, City, State and Zip Code) is copied.

Drinking Water Well Construction Form: Only the Well Constructor information (Business Name, License, Address, City, State and Zip Code) is copied.

(Note: If a First Water Quality Test record is entered, the Property Owner info, county, and well completion date will be copied after the WUWN is entered.)

Monitoring Well Construction Form:

All Route To boxes
Facility/Project Name
Facility License, Permit, or Monitoring No.
Facility ID
Section
Township
Range
Range Direction
Well Installed By - First Name
Well Installed By - Last Name
Well Installed By - Firm Name
Firm

Soil Boring Log Form

All Route To boxes
Facility/Project Name
License/Permit/Monitoring Number
Boring Drilled By - First Name
Boring Drilled By - Last Name
Boring Drilled By - Firm
Section
Township
Range
Range Direction
Facility ID
County
County Code
Civil Town/City/ or Village
Firm

Monitoring Well Development Form:

All Route To boxes
Facility/Project Name
Facility License, Permit, or Monitoring No.
County Name
County Code
Well Developed by - First Name
Well Developed by - Last Name
Well Developed by - Firm
Name and Address of … - First Name
Name and Address of … - Last Name
Name and Address of … - Facility/Firm
Name and Address of … - Street
Name and Address of … - City
Name and Address of … - State
Name and Address of … - Zip
Firm

When trying to update information on an existing data record, you must be in Edit Record mode. If you have not clicked the Edit Record button, built in edit checks on key data fields will not be performed and data problems could occur later.

If you are entering a new record into a form other then the Groundwater Monitoring Inventory Form 3300-67, first move to the Wisconsin Unique Well Number field and key in the unique well number. If you have previously entered that unique well number into one of the three previously mentioned forms, the program automatically populates all corresponding data fields from those forms.

When entering information into a date field, you can use the pop-up calendar feature built into the program to select the date value. Just click on the gray box to the side of the date field and a pop-up calendar will appear. If you are entering the date manually, please follow the month/day/year (mm/dd/yyyy) format.

Find a Well 

A button has been placed on each form screen which will allow you to locate existing data records, in that form, for up to five (5) different selection criteria:

Wisconsin Unique Well Number
Facility Name
Facility/License Number
Local Well Name
DNR Well ID Number

If the data field you are searching on has non-unique data such as Local Well Name, by clicking on the Find button again after the first occurrence has been located, click on the Find Next button and records will continue to be located until no more matching records are present in the database.

Note:

The Groundwater Monitoring Well Information Form (WIF) works by first locating the correct facility before any specific wells can be located in that facility.

Several forms do not have all the searchable fields available. Only the fields available on the forms can be searched with the Find feature.

Important Information About the Microsoft Access 97 Database

The current version of the Well Forms Program has a Microsoft Access 97 format database. It is designed to be viewed with Access 97 or this program. Please be very careful when viewing the data with any other version of Microsoft Access. If you try to use Microsoft Access 2000, 2003, 2005 or 2007 to view the data, that program may try and convert it to that newer format. If the program database is converted to a newer format, it **will not work** with this program. It is recommended that you **DO NOT CONVERT THIS DATABASE TO A NEWER FORMAT.** This program will not be able to access the database if it is converted to Access 2000, 2003, 2005 or 2007 format.

You must be extra careful if you have Access 2000, 2003, 2005 or 2007 loaded on the same machine or use it to view databases. It may try and convert older versions of Access to the newer file format. This happens when you are using Windows Explorer or File Manager and double click on an Access database file (.mdb extension) to view it.

Database Utilities 

This program selection contains two (2) utilities. The first allows for **compaction** of the program databases and the second allows for backup to an external file copy. Compacting refers to the recovering of empty space when a record is deleted. Deleted record space is not automatically returned to the system for reuse when a record is deleted. Recovering deleted record space is done only when the database is compacted, otherwise only the record pointer is changed.

The second utility option allows you to make a **backup** copy of the program databases in Microsoft Access format. Choose this option and enter a file name and drive and directory location and the program database is saved.

Making a backup copy periodically is very important. It is often good to make a backup copy on another drive or computer then the one you are running this program on. For data integrity reasons, make backups often. It is a small investment in time and resources to make a backup as opposed to having to deal with the potential of file corruption and data loss. If a database problem should occur, a backup copy can be loaded directly back into the program database, through the normal data import option, if necessary. A backup schedule is an important part of PC data management.

Required Data Entry 

Each of the eight currently implemented forms (First Water Quality Test, Drinking Water Well Construction, Monitoring Well Construction, Monitoring Well Development, and Well/Drillhole/Borehole Abandonment, Soil Boring Log, Groundwater Monitoring Well Information Form and Groundwater Monitoring Inventory Form) must be filled out per the requirements of the DNR program to which you are submitting the information. In most cases all the fields on the form must be filled out. If you are unable to fill in a particular field, contact the project manager prior to submitting the form. Warning messages will be displayed if certain fields associated with the Department's data quality control are not completely filled in.

The First Water Quality Test Form 3300-77, is designed to capture information from the collection of the first water quality test sample for a water supply well.

Fields required for quality control:

Wisconsin Unique Well Number
Property Owner
Mailing Address
City
State
Zip Code
County Name
Well Constructor License #

The Drinking Water Well Construction Form 3300-77A, is designed to capture information from the construction and development of a drinking water supply well.

Fields required for quality control:

Wisconsin Unique Well Number
Property Owner
Mailing Address
City
State
Zip Code
County Name
Well Completion Date
Town/City/Village box

Town/City/Village Name
Public Land Survey (PLS) Location **OR** Latitude and Longitude (one must be entered)
Lat/Long Method (only if Latitude and Longitude are entered)
Well Type
Construction Drilling Method Code
High Capacity Well box
High Capacity Property box
Well Upslope/Downslope of Contamination box
Well Located in a Floodplain box
Drillhole Diameter
Drillhole Depth To
Casing/Liner/Screen Diameter
Casing/Liner/Screen Material Description
Casing/Liner/Screen Depth To
Static Water Level
Pumping Level
Pumping at (GPM/GPH)
Pumping Hours
Well Above/Below Grade Amount
Well Above/Below Grade box
Well Developed box
Well Disinfected box
Well Capped box
Drillers Initials
Driller Signed Date

The Monitoring Well Construction Form 4400-113A, is designed to capture information from the construction and development of a monitoring well.

Fields required for quality control:

Well Code
Lat/Long **OR** State Plane **OR** Public Land Survey (PLS) Location (one must be entered)
Wis. Unique Well Number

Note:
If Watershed/Wastewater is selected for Routing to, then a Local Grid Coordinate is also required.

The Monitoring Well Development Form 4400-113B, is designed to capture information from the well development procedures on the monitoring well.

Fields required for quality control:

County Name
Wis. Unique Well Number
Name **OR** Firm for the facility address or owner (one must be entered)
Street
City
State

The Well/Drillhole/Borehole Abandonment Form 3300-5, is designed to capture information about the abandonment procedures on a well, drillhole or borehole.

Fields required for quality control:

County
PLS Location **OR** Grid Location (one must be entered)
Name of Person or Firm Doing Sealing Work
Street or Route
City
State

The Soil Boring Log Information Form 4400-122, is designed to capture information about the initial soil boring hole or the well boring hole.

Fields required for quality control:

County
PLS Location **OR** State Plane **OR** Latitude/Longitude (one must be entered)

The Groundwater Monitoring Well Information Form 4400-89, is designed to capture information about the wells in a facility.

Fields required for quality control:

WI Unique Well No. (only if the Well Type Code is 11/mw, 12/pz, 13/pw, 14/ly, 18/at, 26/ew, 27/he, 71/dw, 72/dp, 80/mc, 81/oc, 82/nn, or 83/tn)
Well Location - State Plane **OR** Local Grid Location (one must be entered)
Well Type Code

The Groundwater Monitoring Inventory Form 3300-69, is designed to capture information about an existing well.

Fields required for quality control:

Wisconsin Unique Well Number
Inventory Completed By
Date
Primary Contact Last Name **OR** Facility Name
Primary Contact Mailing Address
Primary Contact City
Primary Contact State
Primary Contact - Contact Type Code (at least one box checked)
County Name

(One of these three groups is required)

Township		Latitude Degrees and Minutes
Range	**OR**	
Range Direction		Longitude Degrees and Minutes
Section		

Well Use
Well Status

Keys and Navigation Help

This program is designed to work with a mouse. There are only a few keys which have any action associated with them.

F1 - Help can always be accessed by pressing the F1 key.

Data Edit/Entry or Browse Mode

F1 - Displays help. Usually the instructions or related help for the form you are currently viewing.

Tab - moves to the next data field on a form in the order defined by the program.

Shift Tab - moves to the previous data field on a form in the order defined by the program.

Space Bar -adds a character space when in a text entry field, or will toggle a check box field on or off from its previous state.

Arrow Up - moves up one line or causes the help window text to scroll up one line.

Arrow Down - moves down one line or causes the help window text to scroll down one line, also scrolls down selections in a drop-down box.

Page Up - moves up one screen page or scrolls up one page when in the help screen text window.

Page Down - moves down one screen page or scrolls down one page when in the help screen text window.

Alt X - exits the program edit/entry screen

Alt A - adds a new blank record for entry

After you add a new blank record these choices are active
Alt S - saves the new entry record
Alt C - cancels the new entry

Alt E - changes to edit mode from browse mode for the currently displayed record

After you enter edit mode these choices are active
Alt S - saves the edit changes
Alt C - cancels the edit changes

Alt P - prints the currently displayed record

Alt D - deleted the currently displayed record

Alt H - displays the instructions for the currently displayed form

Ctrl Enter - adds a line break in a text entry box where multi-line entry is allowed.

Program Specific Features

Problems With the Date Display and/or Date Printing

If the date is displaying and/or printing improperly, the problem can be corrected by changing a setting in your computer. Please follow the instructions below from your normal desktop screen:

Microsoft 95, 98 and NT Operating Systems:

1. Click on the "My Computer" icon
2. Click on the "Control Panel" icon
3. Click on the "Regional Settings" icon
4. Click on the "Date" tab
5. Change the Short date style to the MM/DD/YYYY format

Microsoft ME, 2000, XP and Vista Operating Systems:

1. Click on the "Start" button
2. Highlight "Settings"
3. Move over and Click on the "Control Panel" option
4. Click on the "Regional and Language Options" icon or choice
5. Click on the "Customize" button
6. Click on the "Date" tab
7. Change the Short date format to "mm/dd/yyyy" from the drop-down selection

All Program Forms

Field Navigation and Screen Jumps

Every form has data fields which are placed in the screen. Each field can be accessed by using the Tab key to move from one to the other in the program defined order, or using the mouse and clicking on any specific field. Imbedded within some of the fields are screen jumps to keep the current field viewable on screen. These are placed at key locations within each form to always keep the cursor visible.

Using the Edit Record Button

Using the large Edit Record button at the top of each form is very important to the program's operation. Edit checks are programmed into each form, but are only activated when the Edit Record button is clicked.

Check Field Color Changes

Check fields are programmed to change to a red highlight color when it is the active entry field on the form. When it is exited, it changes back to its original color.

Scroll Bars

Scroll bars are located in the upper left corners of each form window and not on the right or bottom as may be

the case in other programs.

Specific Forms

Drinking Water Well Construction Form

Add New Record: On the Drinking Water Well Construction form you can add a completely new record by pressing the Add New Record button. If you want to add a single geology log record, then go to the empty space at the bottom of geology log entry area and enter it here.

Delete Record: You can delete the entire construction record, associated geology log records, and comments or you can delete one individual geologic log record. If you want to delete only one geologic log record, put your curser in that record and press the Delete Record button. Answer No the the first question about deleting the entire record and answer Yes to the second question.

If a record was entered into the First Water Quality Test Form, when you enter the corresponding Wisconsin Unique Well Number, you will be asked if you want to copy the Property Owner, County, Well Completion date, and Well Constructor information. If you answer Yes, the information will be automatically filled into the corresponding fields.

The Lat/Long Method field selections are accessed by a pop-up screen, which activates when you enter a latitude/longitude coordinate. Unless you enter a latitude/longitude coordinate you will not be able to enter this value. It is required only if you do enter a latitude/longitude coordinate.

Geology Codes, in section 8, can be entered by having the flashing curser in one of the four fields and typing any character. It can only be activated by typing a character. A pop-up form will automatically display selections for all four Geology Code fields. When geology codes are selected, the corresponding code description will automatically populate the Geology description field. To change a previously entered geology code value, type any character while in one of the four geology code fields and the pop-up selection screen will be displayed again. Reselect a new set of values and they will replace the existing ones along with the new descriptions. If you enter additional text in the Geology description field, this will be lost if new codes are selected.

Mandatory Keying Requirements – Well Construction Report Form 3300-77A

- Key the Well Construction Report in Caps Lock.
- You must use decimals instead of fractions.
- Date format is MMDDYYYY
- When keying in the name use the format last name, comma, first name.
- If keying in latitude-longitude, you must tab or click in the lat/long method field and select a method from the available list. After you've highlighted a method, click on exit.
- When keying geologic codes, you must tab in the code, press a key or the spacebar to get the code selection screen to come up. Highlight the selected codes, click on exit. You must select a Primary Lithology Code. Other Codes are optional.

Access to Wisconsin Unique Well Numbers

To access Wisconsin Unique Well Numbers (WUWN), there are two people to call. For drinking water wells, you must call Sandy Hershberger at (608) 267-7605 or e-mail at Sandra.Hershberger@wisconsin.gov. For monitoring wells you must call David Johnson at (608) 261-6421 or e-mail at David.Johnson@wisconsin.gov. You will be assigned a block of numbers.

E-Mail Address to Send Well Construction Reports to the DNR 

Send well construction reports to Sandy Hershberger at e-mail address Sandra.Hershberger@wisconsin.gov

Water Samples

The system has been set up to generate a water sample form from your printer that includes the WUWN.

1. Go into "First Water Quality Test" 3300-77. Assign a WUWN and complete the sample form including the name, address, county, your License ID. Save that information, print the sample form and use it for taking your sample.
2. The assigned WUWN will transfer to the "Well Construction Report" 3300-77A along with the name, address, county and your License ID again. Key the WUWN in the WUWN field, leave the field and a question will pop up whether or not you want to transfer the information from the water sample to the well construction report. If you answer yes, the data will transfer.

Soil Boring Log Form

Add New Record: On the Soil Boring Log form you can add a completely new boring record by answering the initial question yes. A new header and associated boring log segments are inserted. If you want to add a single boring segment record, then go to the empty space at the bottom of boring log entry area and enter it here.

Delete Record: You can delete the entire record, header and associated log records, or you can delete one individual log record. If you want to delete only one boring log record, put your curser in that record and press the Delete Record button. Answer No the the first question about deleting the entire record and answer Yes to the second question. This form is designed to require one record always be present in the database. The database for this form comes with one place holder record already present. You may delete all but one record from this form.

Each of the fields listed below has a specific size limit listed for entry. The program may appear to allow more entry then is allowed, but any extra text entered will be truncated and a message to this effect will be displayed.

Number and Type field: Allows entry of 10 characters of text.

Length Att. & Recovered: Allows entry of up to 15 characters of text.

Blow Counts: Allows entry of up to 15 characters of text.

Soil/Rock Description field: Allows entry of up to 250 characters of text description.

USCS Classification: Allows entry of up to 10 characters of text, although the first two characters are used for the USCS log code.

Graphic Log field: The graphic log is displayed only when the form is printed. Predefined graphics are already in the program which are retrieved based on the USCS code entered. A listing and display of the graphics and codes can be found under the Soil Classification Codes help section for the Soil Boring Log form. The database file (SoilType.mdb) where the log keys are kept can be edited using Microsoft Access to add new codes and symbols. Log graphics are small BMP format files which can be modified or new ones created and added.

RQD/Comments: Allows entry of up to 70 characters of text.

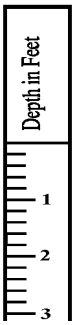
Boring Log Printing:

Soil boring logs will be printed with each log entry positioned relative to the user entered Depth in Feet scale. Soil/Rock descriptions may be position adjusted based on the amount of text in the previous description, but will be linked to the exact depth they reference. The Graphic Log columns are printed in their exact depth position relative to the depth scale. USCS codes are printed in the actual depth position unless the position of the previous code requires it be position adjusted.

Boring Log Depth Increment

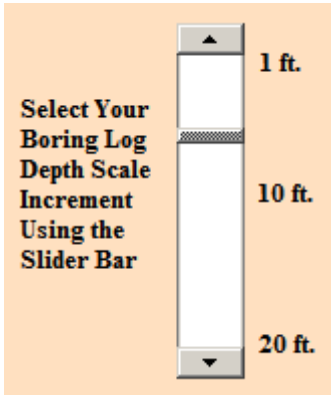
This program allows a user to select their own Soil Boring Log depth increment scale used on the printout for a particular log record. A number from 1 foot to 20 feet can be selected for the printed Depth in Feet scale. The number represents the increment displayed/printed for each major log scale mark, representing every 5th mark on the printed Depth in Feet scale.

For example, if 1 foot is chosen, every 5th depth will increment 1 additional foot of depth.



If 5 feet is chosen, every 5th depth mark will increment 5 feet in depth.

Selecting the depth increment is very simple. A slider bar can be moved down or up, using the mouse or arrow keys, to increase or decrease depth 1 foot at a time from a 1 foot minimum to a 20 foot maximum. Increments are made in integer number values. No decimal values are allowed.



An approximate number of printed pages estimate is also being displayed and recalculated as the depth increment is changed. This estimate gives an approximate calculation of the number pages to expect on the final printout. This is only an approximate number of pages estimate. Page length is affected by number of lines it takes to print text in the Soil/Rock Description and RQD Comments fields. If the page estimate exceeds more then 3 pages, a warning message will be displayed asking if it is OK to proceed.

Well Information Form (WIF)

Add New Record: The Well Information Form allows you to add a completely new facility record and then enter associated well or other types of point records. A single associated well or point record can be added by answering the initial question no, and the second question about adding a single associated facility record yes.

Delete Record: You can delete the entire facility record, header and associated well records, or you can delete one individual well record. If you want to delete only one well record, put your curser in that record and press the Delete Record button. Answer No the the first question about deleting the entire record and answer Yes to the second question.

Software Updates

From time to time program enhancements or fixes will occur. These will be available on the World Wide Web. The current version number of this program is located on the Main program screen at the top. Please check this number against the update information available on the Department's Groundwater Information web site. The World Wide Web address for program copies and version upgrades is:

WWW.DNR.STATE.WI.US/ORG/WATER/DWG/GW/SOFTWARE.HTM

You may also go to the Departments Groundwater Home page (WWW.DNR.STATE.WI.US/ORG/WATER/DWG/GW/) and then choose the link to the Groundwater Publications page then choose the link for DNR Well Forms Software and Forms Distribution.

Updates can also be received by contacting Randell Clark at (608) 267-7895 or by e-mail to Randell.Clark@wisconsin.gov.

Sending Data Back to the Department

Electronic data from the Drinking Water Well Construction Form (3300-77A) need only be sent to the Department. Paper copies are not required. If you are filling out any of the other seven electronic forms in this program, you still need to submit paper copies of those forms to the DNR project manager with site reports. We encourage you to send all data back to the Department's Bureau of Drinking Water and Groundwater in electronic format. Data should only be sent to one of the two people listed below. From your additional efforts to send the Department electronic data, we will be building a statewide database of the electronic data submittals. If you return your electronic well information to the person or E-mail address below, you can then request information for other areas of the state from the consolidated statewide database. The data will be available to you at no additional cost. The hope is that by everyone contributing their information, all can benefit from the results and you can see a benefit on your next or future projects, and help to speed review and permitting processes. Additionally, we will be compiling a list of e-mail addresses and will use this list to notify users of important program issues or the availability of program updates as soon as they are posted.

Using the program's export feature on the Main program menu titled "Data Export/Import" you can export database records to an external file using the available export selection criteria. The exported database file can be e-mailed as an attachment file if your mail system supports mail attachments. E-mail a message and the

attachment database file to the e-mail address below. If you do not have e-mail or can not include attachments in your e-mail messages, then use the U.S. Postal Service mail. Export the database file, copy it onto a 3 ½ inch disk, and mail it to the address below.

Important Note: All electronic Drinking Water Well Construction Form (3300-77A) data should be sent to Sandy Hershberger below. Data from the other seven (7) forms should be sent to:

Randell V. Clark - DG/5
Wisconsin Department of Natural Resources
101 S. Webster, P.O. Box 7921
Madison, WI 53707-7921

Phone: (608) 267-7895

E-mail: Randell.Clark@wisconsin.gov

For Drinking Water Well Construction data only, send to:

Sandy Hershberger - DG/5
Wisconsin Department of Natural Resources
101 S. Webster, P.O. Box 7921
Madison, WI 53707-7921

Phone: (608) 267-7605

E-mail: Sandra.Hershberger@wisconsin.gov

A compression or zipping program will help reduce the file size before it is e-mailed or mailed. Please use an industry standard file compression program format or self extracting executable format.

If you have any additional questions, problems, or comments about the program export feature, sending back electronic data, or the consolidated statewide database, please contact Randell Clark.

Drinking Water Well Construction Form

INSTRUCTIONS FOR COMPLETING THIS COMBINED FORM

NOTICE: Section NR 812.22, Wis. Adm. Code, requires that all new or reconstructed wells be tested for bacteriological safety and a well construction report be completed by the well constructor. Copies of the test results and the well construction report shall be submitted to the Department and a copy provided to the well owner within 30 days after water testing and well construction.

This form must be completed for every well constructed (drilled or driven point). Type or print very hard, and legibly, with a black ink ballpoint pen on a firm surface. Also, please use decimals instead of fractions. The following instructions are to help you complete the form.

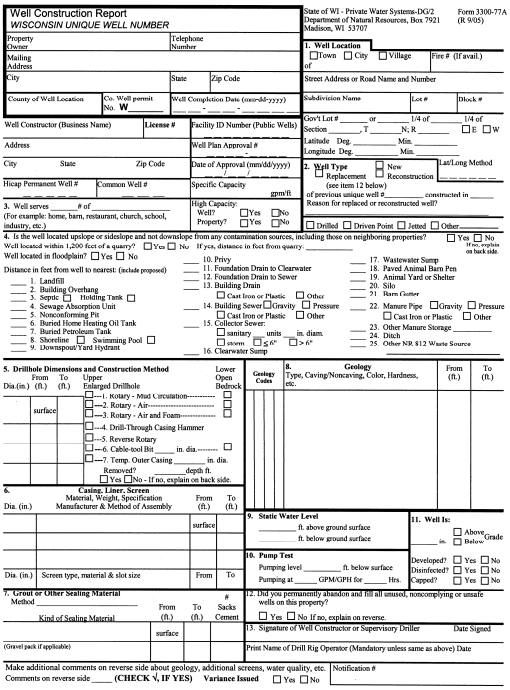
Completion of this form is mandatory. This form is authorized by ss. 280.1 I (1) and 281.19(l), Wis. Stats., and chs. NR 812 and NR 146, Wis. Adm. Code. Penalties for failure of the well constructor to submit a completed form to the Department is punishable by a forfeiture of not less than $10 or more than $5,000.00; or by fines of not less than $10 or more than $100 or imprisonment not less than 30 days or both; or license suspension or revocation. Each day of continued violation is a separate offense (ss. 280.97 and 299.97, Wis. Stats.) Personally identifiable information on this form will be used for sending job-related materials, well labels and directing the water supply program. The Department plans to make the information on this form available electronically on the Internet.

WATER QUALITY TEST

Keep the water quality test slip attached until you have filled out the requested information above the "STOP" line. Then remove the slip and complete the unshaded areas. In counties where a well permit is required, be sure to enter the County Well Permit number. The test explanations and sampling directions are on the back of the water quality test slip. **DO NOT use this slip for follow-up water quality testing. Request an individual test slip and bottle from any certified water bacti lab that will report the test results to the department.**

WELL CONSTRUCTION REPORT

Property Owner: Enter the last name, a coma, followed by the first name. If there is no person and it is a business or facility, enter the full business or facility name.


Well Construction Report
WISCONSIN UNIQUE WELL NUMBER
State of WI - Private Water Systems-DG/2 Department of Natural Resources, Box 7921 Madison, WI 53707
Form 3300-77A (R 9/05)
Property Owner
Telephone Number
Mailing Address
City
State
Zip Code
County of Well Location
Co. Well permit No. W
Well Completion Date (mm-dd-yyyy)
1. Well Location
Town City Village
Fire # (If avail.)
of
Street Address or Road Name and Number
Subdivision Name
Lot #
Block #
Well Constructor (Business Name)
License #
Facility ID Number (Public Wells)
Gov't Lot # or 1/4 of 1/4 of
Section , T N; R E W
Address
Well Plan Approval #
Latitude Deg. Min.
Longitude Deg. Min.
City
State
Zip Code
Date of Approval (mm/dd/yyyy)
2. Well Type
New
Replacement
Reconstruction
(see item 12 below)
Lat/Long Method
Hicap Permanent Well #
Common Well #
Specific Capacity
gpm/ft
of previous unique well #
constructed in
Reason for replaced or reconstructed well?
3. Well serves # of
(For example: home, barn, restaurant, church, school, industry, etc.)
High Capacity: Well? Yes No Property? Yes No
Drilled Driven Point Jetted Other
4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? Yes No
If yes, explain on back side.
Well located within 1,200 feet of a quarry? Yes No If yes, distance in feet from quarry:
Well located in floodplain? Yes No
Distance in feet from well to nearest: (include proposed)
1. Landfill
2. Building Overhang
3. Septic Holding Tank
4. Sewage Absorption Unit
5. Nonconforming Pit
6. Buried Home Heating Oil Tank
7. Buried Petroleum Tank
8. Shoreline Swimming Pool
9. Downspout/Yard Hydrant
10. Privy
11. Foundation Drain to Clearwater
12. Foundation Drain to Sewer
13. Building Drain
Cast Iron or Plastic Other
14. Building Sewer Gravity Pressure
Cast Iron or Plastic Other
15. Collector Sewer:
sanitary units in. diam.
storm ≤ 6" > 6"
16. Clearwater Sump
17. Wastewater Sump
18. Paved Animal Barn Pen
19. Animal Yard or Shelter
20. Silo
21. Barn Cistern
22. Manure Pipe Gravity Pressure
Cast Iron or Plastic Other
23. Other Manure Storage
24. Ditch
25. Other NR 812 Waste Source
5. Drillhole Dimensions and Construction Method
From (ft.) To (ft.) Upper Dia.(in.)
Lower Open Bedrock
surface
1. Rotary - Mud Circulation
2. Rotary - Air
3. Rotary - Air and Foam
4. Drill-Through Casing Hammer
5. Reverse Rotary
6. Cable-tool Bit in. dia.
7. Temp. Outer Casing in. dia. Removed? depth ft.
Yes No - If no, explain on back side.
8. Geology
Geology Codes
Type, Caving/Noncaving, Color, Hardness, etc.
From (ft.)
To (ft.)
6. Casing, Liner, Screen
Dia. (in.)
Material, Weight, Specification Manufacturer & Method of Assembly
From (ft.)
To (ft.)
surface
Dia. (in.)
Screen type, material & slot size
From
To
9. Static Water Level
ft. above ground surface
ft. below ground surface
11. Well Is:
Above Grade
in. Below
10. Pump Test
Pumping level ft. below surface
Pumping at GPM/GPH for Hrs.
Developed? Yes No
Disinfected? Yes No
Capped? Yes No
7. Grout or Other Sealing Material
Method
Kind of Sealing Material
From (ft.)
To (ft.)
Sacks Cement
surface
(Gravel pack if applicable)
12. Did you permanently abandon and fill all unused, noncomplying or unsafe wells on this property?
Yes No If no, explain on reverse
13. Signature of Well Constructor or Supervisory Driller
Date Signed
Print Name of Drill Rig Operator (Mandatory unless same as above) Date
Make additional comments on reverse side about geology, additional screens, water quality, etc.
Comments on reverse side ____ (CHECK √, IF YES)
Variance Issued Yes No
Notification #

ITEM 1. Well Location**: Include street addresses and, if the property is in a subdivision, the lot and block numbers.** The location information can be obtained from a plat book, GPS unit, topographic quadrangle sheet, or local government official. Enter at least one of the two following types of location coordinates: Public Land Survey coordinate (Township, Range, Range Direction, Section, Quarter Section, and Quarter Quarter Section) **OR** a Latitude and Longitude (Degrees, Minutes, and Seconds) coordinate. If Latitude and Longitude are entered, the Lat/Long Method must be entered. This field represents the method which the coordinate was collected (see description of Lat/Long Method field on the backside).

ITEM 2. Well Type, Reason for Construction: Replacement means replacement of an existing well; Reconstructed means modification of an existing well by deepening, lining, underreaming, hydrofacturing, blasting or screen replacement. Some reasons for well construction include new home, gasoline or bacteriological contamination in old well, old well went dry, sand pumping well and plugged screen.

ITEM 3. Enter the number of homes the well serves and/or list any additional facilities the well serves. A high capacity well is one in which the pumping capacity of the well is equal to or greater than 70 gallons per minute. A high capacity property is one in which the total pumping capacity of all wells on the property is equal to or greater than 70 gallons per minute.

ITEM 4. Mark if the well is located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties. Explain on the reverse if the well is downslope. Indicate if the well is in a floodplain.

Also, indicate the distances in feet, between the well and nearest contamination sources on the property and any adjacent neighboring properties. See Table A in the Private Well Code (NR 812) for a list of contamination sources and the minimum location distances. Check DNR landfill list for information on landfills in the area near the well.

ITEM 5. If construction method was used other than those listed, explain method on back of form.

ITEM 6. Enter the diameter of the casing, liner and/or screen. Describe the material, weight specifications, list the manufacturer, method of assembly and enter the depth information. Describe the screen type, material, slot size and depth information, if a screen is installed.

ITEM 9. Static Water Level: Report the depth to water below ground surface, as measured in feet. For flowing wells, static water level is measured in feet of head above ground surface.

ITEM 11. Indicate height of casing above the ground. Indicate if the well was developed (pumped, bailed or surged) to remove sand and other particles, and disinfected with a mixture of bleach and water. The well must also be covered with an approved vermin proof cap sealed at the top to prevent entry of contaminants.

ITEM 12. All unused, noncomplying or unsafe wells must be properly filled to protect drinking water and groundwater quality. Cement grout, concrete, or bentonite chips are allowed as fill material although chipped bentonite is allowed for wells of certain depths and diameters. For more information on well abandonment, see publication DG-016 2004, "Answers to Your Questions on Well Abandonment." Please indicate the status of the old well and whether or not it was properly abandoned and filled.

ITEM 13. Signature: Sign your name and the date in the well constructor box.

FOR DRIVEN POINT WELLS: Complete items 1, 2, 3, 4, 5, 6, 9, 11, 12 and 13 on the form. For more information refer to the brochure entitled "You and Your Well" or contact your DNR region office.

Send the copies of the well construction reports to the party indicated on the bottom of each copy.

Selected Data Field Descriptions Listed by Form Section.

Item 1:
Lat/Long Method: This field lists standard horizontal data collection method codes for data collected in latitude and longitude coordinates. This field must be entered if a latitude/longitude coordinate is entered. The field only applies to data collected in latitude/longitude coordinates. These codes were created by the Wisconsin DNR.

GPS006 - Mapping or recreational grade GPS receiver with no differential correction and selective availability off
GPS007 - Mapping or recreational grade GPS receiver with no differential correction and selective availability on
GPS008 - GPS receiver grade and/or differential correction procedures unknown
LOR001 - Loran C radio receiver
MLT001 - Multiple locational data collection methods used for one feature
OTH001 - Other locational data collection method
PAR001 - Interpreted from parcel description
SCR001 - Digitized on screen: feature published/visible on digital orthophoto
SCR002 - Digitized on screen: feature interpreted from digital orthophoto
SCR003 - Digitized on screen: feature published/visible on USGS 7.5-minute digital raster graphic
SCR004 - Digitized on screen: feature interpreted from USGS 7.5-minute digital raster graphic
UNK001 - Unknown/guess
VRT001 - Topographic map interpolation: feature altitude or depth published/visible on source map
VRT002 - Topographic map interpolation: feature altitude or depth interpolated from source map

This list is not a full selection of available Lat/Long collection method codes. The complete listing is available in the DNR Locational Data Standards document.

Item 8:
Geology Codes: These 1 character codes represent color, texture, primary and secondary lithology for the borehole's geologic section. **A selection must be made for Primary Lithology.** Two examples are: a red "rotten" granite with no secondary lithology would be RDQ**-**; a tan sandy glacial outwash would be T**-**OS (**-** used to represent a blank column).

Color		Texture		Primary Lithology		Secondary Lithology	
T = Tan/Brown		F = Fractured		S = Sand		S = Sandy	
K = Black		B = Broken		M = Silt		M = Silty	
U = Blue		C = Cavernous		C = Clay		C = Clayey	
G = Gray		D = Decomposed/ Weathered		G = Gravel/Cobbles/ Boulders/Stones		G = w/Gravel/Cobbles/ Boulders/Stones	
O = Orange		H = Hard/Firm		P = Hardpan		P = w/Hardpan	
R = Red		S = Soft/Loose		L = Limestone/Dolomite		L = Limey or Dolomitic	
P = Pink		N = Fine		H = Shale		H = Shaley	
Y = Yellow		M = Medium		N = Sandstone		N = w/Sandstone	
E = Green		A = Coarse		J = Crystalline		J = w/Crystalline	
I = White		L = Fossiliferous		Q = Granite		Q = w/Granite	
		X = Lensed/Streaked/ Layered		B = Basalt or Trap Rock		B = Basalt or Trap Rock	
		Q = Caving		A = Conglomerate		A = w/Conglomerate	
		V = Non-Caving		T = Till		D = w/Glacial Material	
		W = Water Bearing		F = Fill		T = w/Till	
		J = Iron		V = Alluvium		F = w/Fill	
		E = Clean		U = Mud or Muck		V = Alluvial	
				I = Soil-Organic		U = Muddy or Mucky	
				O = Outwash		I = w/Soil-Organic	
				X = Sand & Clay		O = w/Outwash	
				Y = Sand & Gravel		R = w/Chert	
				Z = Clay & Gravel		K = w/Broken Rock	
				E = Peat		W = w/wood	

REMOVE INSTRUCTIONS BEFORE COMPLETING FORM.

First Water Quality Test Form (3300-77)

All new, replacement, or reconstructed wells must be tested for bacteriological safety.

Fill out the form down to the shaded areas. You may use the Other Tests or Comments shaded area if you need to. Fill in all requested information.

When completed, print this form out and send it to a certified laboratory along with your sample.

You must collect a bacteriological sample for this well. A nitrate, fluoride, atrazine or other tests are optional, although the Wisconsin Groundwater Coordinating Council has endorsed a recommendation to take a nitrate sample in addition to bacteria.

Collect your sample just prior to mailing or bringing it to the laboratory. Bacteriological samples have shorter holding time requirements which should not be exceeded.

Form Fields Help:

Property Owner: Enter the last name, a coma, followed by the first name. If there is no person and it is a business or facility, enter the full business or facility name.

EXPLANATION OF THE TEST

New wells must be tested for bacteriological safety. You may also request a nitrate or fluoride test. Contact laboratories in your area.

BACTERIOLOGY: The presence of coliform bacteria in well water shows that unfiltered, or poorly filtered surface water may have found its way into the well. This indicates that the water is potentially dangerous. You should test for bacteria **annually** or any time the well water changes in taste, odor, color, or appearance.

NITRATE TEST: High levels of nitrate in water present a potential health problem for infants less than six months of age. Nitrate is changed to nitrite in the stomachs of small infants. The nitrite then interferes with the blood's ability to carry oxygen, and symptoms of suffocation or "blue baby syndrome" can occur. This problem generally does not affect older infants or adults eating solid food. This test is recommended for all wells serving children less than six months of age. For more information, contact the DNR for a Nitrate Brochure.

FLUORIDE TEST: Knowledge of the level of naturally occurring fluoride will be useful to your dentist in prescribing a fluoride treatment program for children. This test is recommended only if your dentist has requested it.

ATRAZINE TEST: Atrazine is the most commonly used pesticide in Wisconsin. If present in amounts above the advisory level in drinking water, atrazine may pose a cancer risk. Testing for atrazine is especially recommended for wells located in non-clay soils in corn producing areas. The Wisconsin State Laboratory of Hygiene can test your drinking water supply for the presence of this pesticide. You can request an Atrazine Test Kit by calling 800-442-4618. There may be other labs that sample for atrazine in your area.

Sample Bottle. The bottle has been sterilized. Do not open until ready to collect sample. Take care not to touch lip of bottle or inside of cap. Improper or careless collection of the sample may cause it to be contaminated, thus giving an "unsafe" test. The instructions for sampling should be carefully followed.

Sampling. The well constructor or their agent shall collect a water sample following completion,

disinfection, and flushing of the well. If the well constructor is also the pump installer, the water sample may be collected following completion, disinfection, and flushing of the pump installation. Fill in all requested information including date and time of collection. You should collect samples just prior to the time mail is picked up from the post office you intend to use. Bacteria are perishable, and holding time is very important. Old samples will not be analyzed. If sample is taken from a sink tap, do not use a swing faucet.

1. Remove aerator or screen if present.

2. Sterilize the tap or faucet by heating it dry by holding a flame beneath the opening. Do not flame a plastic faucet. It will melt. Eliminate this step if you use a plastic faucet as a sampling point.

3. Run the water for a few minutes. Do not change the flow rate or wash or wipe the tap before collecting the sample.

4. Remove the cap taking care not to touch lip of bottle or inside of cap.

5. **Fill bottle to within one-half inch of the top.** Do not overfill or run over the top.

6. Replace cap securely, again taking care not to touch inside of cap or lip of bottle.

7. Send the water sample and test slip to a laboratory certified for bacteria testing of water.

Monitoring Well Construction Form 4400-113A

General Instructions: Fill out both a monitoring well construction form (4400-113A) and a monitoring well development form (4400-113B) for each well installed. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

Routing: Return these forms to the project manager or plan reviewer for the DNR program who required the well installation. If the project manager/plan reviewer is in the Regional Office, send the original forms to the Regional Office and a copy to the Central Office in Madison. If the project manager/plan reviewer is in the Central Office, send the original forms there and a copy to the Regional Office. If your project does not have a project manager or plan reviewer or you don't know who it is, send the forms to the appropriate program in the Central Office. The addresses of the DNR offices are provided on the attached map.

Check the appropriate routing box at the top of the forms to assure proper routing once the forms reach DNR.

Time-saving tip: When filling out many forms at once, you can save time by using a photocopier. Fill out one form (the "original") with any information that is the same for all wells, such as facility name, section location, grid origin location, drilling method and well casing type. Photocopy both sides of the "original", making as many copies as there are wells. On the separate copies, fill in the details that are unique for each well.

TOP LEFT

Facility/Project Name: Fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility License, Permit, or Monitoring Number: Fill in number assigned to facility by the Department. If unknown, leave blank.

Facility ID: Fill in the nine digit Facility ID (FID) assigned to the site.

Type of Well: Record the type of well code (number/initials) from the following list:

11/mw Water table observation well (monitoring well screen intersecting the water table) (non Subtitle D well)
12/pz Piezometer (monitoring well with screen sealed below the water table) (non Subtitle D well)
17/gc Gradient control
18/at Aquifer test
24/lh Leachate head well
26/ew Groundwater extraction well
27/he Horizontal groundwater extraction well
28/hw Horizontal monitoring well
29/ha Horizontal vapor extraction well

51/gp Gas probe
53/ge Gas extraction well
57/sv Soil venting wells (includes both soil vapor extraction and bioventing, includes both extraction and unsaturated zone gas phase injection wells installed in soil or fill, but not refuse
61/ij Injection well (injection of liquids not gases)
62/as In situ air sparging well (injection well to inject gases into the aquifer
63/uv Unterdruck Verdampfer Brunnen (UVB) wells (sparging wells where the gases remain in the well and are not injected into the aquifer)
64/le Groundwater and light non-aqueous phase liquid (LNAPL) extraction wells
65/de Groundwater and dense non-aqueous phase liquid (DNAPL) extraction wells
66/ve Vacuum enhanced groundwater extraction wells
67/vi Vacuum enhanced groundwater and LNAPL extraction wells
68/vd Vacuum enhanced groundwater and DNAPL extraction wells
71/dw Subtitle D water table observation well (see 11/mw above)
72/dp Subtitle D piezometer (see 12/pz above)
99/Ot Other

Distance From Waste/Source: Enter distance in feet from the monitoring well to the edge of a facility waste storage or discharge structure, e.g., from the edge of a wastewater lagoon or the approved waste fill boundary for a landfill. For a contaminant source which is not a facility, e.g., a spill, enter the distance the well is from the contaminant source.

Enf. Stds. Apply: Check this box only if enforcement standards apply at this well. Enforcement standards apply at any well beyond the Design Management Zone or the property boundary of the facility or at a water supply well. For spills, enforcement standards apply at every point at which groundwater is monitored. (For more information, see s. NR 140.22, Wis. Adm. Code.)

TOP CENTER

Local Grid Location: The location of the well to the nearest foot, in relation to the grid origin established for the site. If the exact location of the well is given in State Plane Coordinates, then leave these fields blank.

Local Grid Origin or Well Location: Check the appropriate box behind the Local Grid Origin or the Well Location text. Locate the grid origin at a permanent feature near the waste or source of contamination. Give the location in State Plane Coordinates or Latitude and Longitude in degrees, minutes and seconds (using 1927 North American Datum). If State Plane Coordinates are used, circle the appropriate letter for south, central, or north zone. Alternately, an acceptable method for providing this information without surveying is to locate the Grid Origin on a USGS 7.5 minute quadrangle map. The Location of the Grid Origin can then be interpolated (estimated) using standard cartographic techniques. If the Grid Origin location is estimated, check the estimated box.

The Well Location can be determined directly by surveying or by Global Positioning System (GPS) (with processing to be accurate within 1 foot and reported with precision to hundredths of a second). If the exact location of the well is given in State Plane Coordinates, then leave the Local Grid Location fields blank.

Section Location of Waste/Source: Fill in the quarter quarter and quarter section, section, township, range and range direction of the waste or source.

Location of Well Relative to Waste/Source: Check the box which describes the location of the well in the groundwater flow system relative to the disposal site, spill, etc. If groundwater flow directions are unknown, check "not known."

Gov. Lot Number: Provide the government lot number for the property if applicable. (Government lot numbers are the legal description of a tract of land adjacent to a lake or stream where a proper quarter or quarter quarter section corner could not be established.)

TOP RIGHT

Well Name: Fill in common well name, such as B-ll, OW-13A, or MW-5R. (Use the suffix "R" for a replacement well.)

Wis. Unique Well Number: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) on this form. In addition, attach a WUWN tag to the inside of the protective cover pipe and record that number on the Soil Boring Log Information form 4400-122 and Monitoring Well Development form 4400-113B. WUWN tags are available from the DNR Central or Regional Offices.

DNR Well ID Number: The 3 digit number assigned to the well by the Department.

Date Well Installed: List Month/Day/Year (mm/dd/yyyy) the well was installed.

Well Installed By: Fill in name (first and last) and firm of the person who supervised the drilling. The person must be a hydrogeologist, a drilling crew chief or experienced engineering technician.

LEFT SIDE

Numerical Specifications: Fill in data for letters A through N which refer to design elements on the figure on the form. Letters A, B and C must be reported as elevations in feet above mean sea level (MSL), surveyed to the nearest 0.01 foot. Letters D through K may be either elevation above MSL or depth below land surface, accurate to the nearest 0.1 foot.

A. **Protective pipe, top elevation**. With cap off. Referenced to Mean Sea Level (MSL).

B. **Well casing, top elevation**. With cap off. Referenced to MSL.

C. **Land surface elevation**. Referenced to MSL.

D. **Surface seal, bottom**. Fill in elevation, MSL or depth below land surface.

E. **Bentonite seal, top**. MSL or depth below land surface. (See NR 141.13(1) to determine if this seal is required)

F. **Fine sand, top**. Cross out if not installed. MSL or depth below land surface.

G. **Filter pack, top**. MSL or depth below land surface.

H. **Screen joint, top**. MSL or depth below land surface. (Top of the entire screen section, NOT the top slot)

L. **Well bottom**. MSL or depth below land surface.

J. **Filter pack, bottom**. MSL or depth below land surface.

K. **Borehole, bottom**. MSL or depth below land surface.

L. **Borehole, diameter**: Diameter to nearest 0.1 inch.

M. **O.D. well casing**: Outside diameter to nearest 0.01 inch.

N. **I.D. well casing**: Inside diameter to nearest 0.01 inch.

LEFT CENTER INSERT (BOX)

12. USCS classification of soil near screen: Check boxes for all soil types (or bedrock) found at the

depths spanned by the well screen, using the Unified Soil Classification System symbols. Refer to the native soil near the screen, not to the filter pack material.

13. **Sieve analysis performed?**: Check box. A sieve analysis for soil near the screen is required for all wells.

14. **Drilling method used**: Choose from among the choices on the form or check "Other" and write in one of the choices below:

Reverse rotary	Solid stem auger	Cable tool	Driven point
Vibratory	Casing hammer	Wash boring	

15. **Drilling fluid used**: Check appropriate box or boxes.

16. **Drilling additives used**: Check box. If yes, describe.

17. **Source of water**: Cite source(s) of any water used to drill the well OR to hydrate dry bentonite OR to mix annular space sealant. Cite exact source so that a sample of the water can be obtained later, if necessary. If the well is at a solid waste facility, attach an analysis of the water according to s. NR 507.06(1), Wis. Adm. Code.

RIGHT SIDE

1. **Cap and Lock**: Check box.

2. **Protective pipe**: Provide the information below.

a. **Inside diameter**: Give to nearest 0.1 inch.
b. **Length**: Give to nearest 0.1 foot
c. **Material**: Check box. If "Other", describe.
d. **Additional protection?**: Check box. If 'Yes', describe.

3. **Surface seal**: Check box for the material used to prevent surface water from entering the borehole. If "Other," describe.

4. **Material between well casing and protective pipe**: Check box. If "Other", describe.

5. **Annular space seal**: Check boxes for both materials used and how installed, and fill in volume used.

Material: If dry bentonite, list source of water used for hydration on line #17. For wells installed at a solid waste site, attach an analysis of water (see s. NR 507.06(1), Wis. Adm. Code.) For other choices, fill in pounds per gallon mud weight or percent bentonite as appropriate.

e. **Volume**: Fill in volume used in cubic feet.
f. **How installed**: Check box for how the annular space seal was installed. If dropped from the land surface, check "Gravity."

6. **Bentonite seal**: If bentonite pellets were used, also check the pellet diameter. If material installed was the same as the annular space seal, or if no filter pack seal was installed, write "none."

7. **Fine sand material**: Fine sand is used to prevent migration of annular space seal material into the filter pack..

a. Indicate manufacturer, product name, and mesh size.
b. Indicate volume added.

8. **Filter pack material**: General description of filter pack material, e.g., "430 grit sand," and name of filter pack manufacturer, product name or number, and volume added. Attach grain size analysis of filter pack and state quantity used.

9. **Well casing**: Check box for PVC type. If "Other", describe. Examples of "Other" include stainless steel, steel, and Teflon ©.

10. **Screen material**: If same as well casing, write "same."

a. **Screen type**: Check box. If "Other", describe the design.
b. **Manufacturer**: List name of manufacturer.
c. **Slot size**: Give width of slot in thousandths (0.001) of an inch.
d. **Slotted length**: Give distance from top slot to bottom slot to nearest 0.1 foot.

11. **Backfill material**: Check "None" or, if "Other", describe any backfill installed below the filter pack.

FAR BOTTOM

"I hereby certify that the information on this form is true and correct to the best of my knowledge.": Sign the form and indicate name of firm.

MONITORING WELL DEVELOPMENT FORM 4400-113B

TOP TWO LINES

Facility/Project Name: Fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility License Permit, or Monitoring Number: Enter number assigned to facility by the DNR. If unknown, leave blank.

County Name: Fill in the name of the county in which the well is installed.

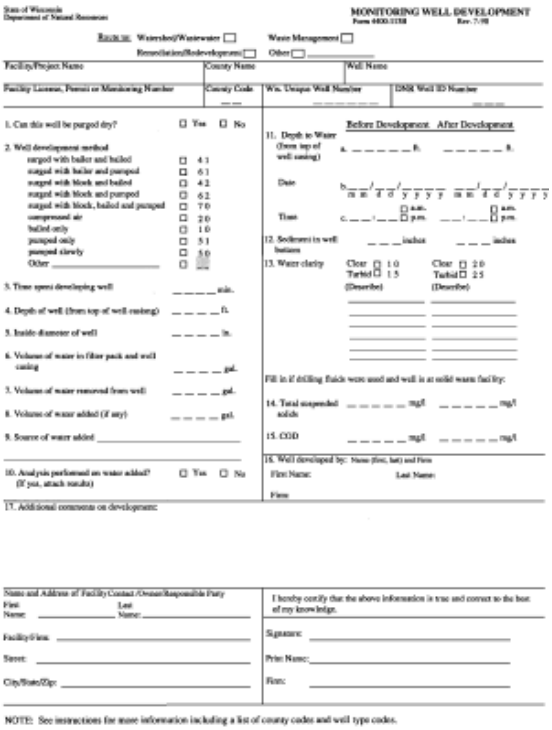
County Code: Fill in the two digit county code number.

1 . Adams	19. Florence	37. Marathon	55. Rusk
2. Ashland	20. Fond Du Lac	38. Marinette	56. St. Croix
3. Barron	21. Forest	39. Marquette	57. Sauk
4. Bayfield	22. Grant	40. Menominee	58. Sawyer
5. Brown	23. Green	41. Mlwaukee	59. Shawano
6. Buffalo	24. Green Lake	42. Monroe	60. Sheboygan
7. Burnett	25. Iowa	43. Oconto	61. Taylor
8. Calumet	26. Iron	44. Oneida	62. Trempealeau
9. Chippewa	27. Jackson	45. Outagamie	63. Vernon
10. Clark	28 Jefferson	46. Ozaukee	64. Vilas
11. Columbia	29. Juneau	47. Pepin	65. Walworth
12. Crawford	30. Kenosha	48. Pierce	66. Washburn
13. Dane	31. Kewaunee	49. Polk	67. Washington
14. Dodge	32. La Crosse	50. Portage	68. Waukesha
15. Door	33. Lafayette	51. Price	69. Waupaca
16. Douglas	34. Langlade	52. Racine	70. Waushara
17. Dunn	35. Lincoln	53. Richland	71. Winnebago
18. Eau Claire	36. Manitowoc	54. Rock	72. Wood

Well Name: Fill in common well name, such as P-11, OW-13A, or MW-5R. (Use the suffix "R" for a replacement well.)

Wis. Unique Well Number: Record Wisconsin Unique Well Number assigned to the well.

DNR Well ID Number: The 3 digit number assigned to the well by the Department.


MONITORING WELL DEVELOPMENT

Facility/Project Name | County Name | Well Name

Facility License, Permit or Monitoring Number | County Code | Wis. Unique Well Number | DNR Well ID Number

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method
surged with bailer and bailed 4 1
surged with bailer and pumped 6 1
surged with block and bailed 4 2
surged with block and pumped 6 2
surged with block, bailed and pumped 7 0
compressed air 2 0
bailed only 1 0
pumped only 5 1
pumped slowly 5 0
Other

3. Time spent developing well ____ min.

4. Depth of well (from top of well casing) ____ ft.

5. Inside diameter of well ____ in.

6. Volume of water in filter pack and well casing ____ gal.

7. Volume of water removed from well ____ gal.

8. Volume of water added (if any) ____ gal.

9. Source of water added

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

11. Depth to Water (from top of well casing) — Before Development / After Development
a. ____ ft. ____ ft.
Date b. ____ m m d d y y y y ____ m m d d y y y y
Time c. ____:____ ☐ a.m. ☐ p.m. ____:____ ☐ a.m. ☐ p.m.

12. Sediment in well bottom ____ inches ____ inches

13. Water clarity — Clear ☐ 1 0 / Tarbid ☐ 1 5 / (Describe); Clear ☐ 2 0 / Tarbid ☐ 2 5 / (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____ mg/l ____ mg/l

15. COD ____ mg/l ____ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Last Name:
Firm:

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Last Name:
Facility/Firm
Street
City/State/Zip

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature:
Print Name:
Firm:

NOTE: See instructions for more information including a list of county codes and well type codes.

LEFT COLUMN

1. Can this well be purged dry? Check whether well can or cannot be purged dry (all water removed).

2. Well development method: Check appropriate box. If "Other", describe. Note that a well shall be surged and purged for a minimum of 30 minutes.

3. Time spent developing well: In minutes.

4. Depth of well: In tenths (0.1) of feet, <u>from top of well casing</u>.

5. Inside diameter of well: In hundredths (0.01) of inches.

6. Volume of water in filter pack and well casing: In tenths (0.1) of gallons.

7. Volume of water removed from well: In tenths (0.1) of gallons.

8. Volume of water added, if any: In tenths (0.1) of gallons.

9. Source of water added: Cite exact source so that a sample of the water can be obtained later, if necessary.

10. Analysis performed on water added? Check appropriate box. If well is installed at a solid waste facility, attach analysis of water according to s. NR 507.06(1), Wis. Adm. Code.

RIGHT COLUMN

11. Depth to water:

Enter distance from top of well casing to water level in well, in hundredths (0.01) of a foot, both before and after development.

Date: Enter month/day/year (mm/dd/yyyy) development began and ended.

Time: Enter according to a twelve hour clock the time development began and ended.

12. Sediment in well bottom: Compute to tenths (0.1) of inches, both before and after development.

13. Water clarity: Check box and describe.

14. Total suspended solids: Total Suspended Solids, as determined by a certified or registered analytical laboratory. Required only for wells near solid waste facilities when drilling fluids were used.

15. COD: Chemical oxygen demand, as determined by a certified or registered analytical laboratory. Required only for wells near solid waste facilities when drilling fluids were used.

16. Well developed by: Enter the name (first and last) and firm of the person who supervised the development This person must be a hydrogeologist, the drilling crew chief, or an experienced engineering technician.

BOTTOM SECTION

17. Additional comments on development: Describe any of the above in more detail or add information such as the relative recovery rates of wells or the amount of drilling fluid lost to the formation and the amount of water removed to account for lost drilling fluid. For example, if 150 gallons of drilling water were, lost, you should remove the volume of water in the filter pack and well casing plus 150 gallons as part of development.

Name and Address of Facility Contact/Owner/Responsible Party: Enter a contact name (first and last), or a firm name or facility name, street address, city, state, and zip code of the facility or site.

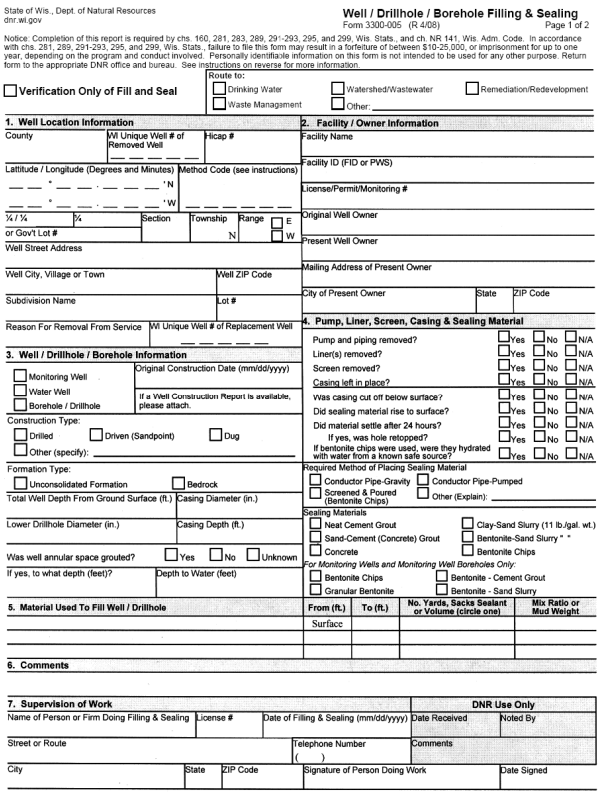
Signature, Print Name, and Firm: Signature and printed name of the person filling out the form and name of firm for which the person works.

Well/Drillhole/Borehole Abandonment - Form 3300-5

Wisconsin Administrative Code (NR 811, NR 812, and NR 141 requires well owners to permanently abandon unused wells/drillholes/boreholes on their property.

PROCEDURE

1. Remove any pump, pump piping, debris or other obstacles that could interfere with the sealing operation. In most situations the well casing should be left in place. When the casing is removed it should be pulled during the abandonment process so the drillhole does not collapse.
2. The sealing material must be placed with a conductor (tremie) pipe either by pumping of by gravity, (except when approved bentonite chips are used according to Department instructions).
3. The bottom end of the conductor pipe must initially reach the bottom of the well and must be kept submerged in the sealing material as it is placed.
4. Unconsolidated formation wells should be sealed with materials listed in item (4) on the form. When clay or sodium bentonite slurry is used to fill wells, the top 20 feet must be sealed with neat cement grout, concrete grout, concrete, or bentonite chips. Bedrock formation wells should be filled with neat cement grout, concrete grout, or concrete. Monitoring Wells must be filled with the materials specified by NR 141, Wis. Adm. Code.
5. Fill the entire well column from bottom to the top with required sealing material.
6. Any standing water in the hole will be forced out by the concrete or cement grout (it is more dense) resulting in an entire column of cement to seal the well. The sealing material must flow at the surface with the same consistency as it is being pumped it.
7. The casing may be cut off several feet below ground surface, but this is not required.
8. To abandon flowing wells, the flow must be stopped or greatly reduced. This can be accomplished by extending the well casing to an elevation higher than the artesian head, or inserting a seal or packer in the casing. Once the flow has been stopped or reduced, the well can be abandoned the same as other wells.
9. For a municipal well, information regarding drillhole diameter and depths and geologic formations should be submitted on a separate sheet.
10. For use of alternative methods and materials, especially for deep, multi-formation wells contact DNR.



State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing
Form 3300-005 (R 4/08) Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal — Route to: ☐ Drinking Water ☐ Waste Managment ☐ Watershed/Wastewater ☐ Remediation/Redevelopment ☐ Other:

1. Well Location Information
County | Wt Unique Well # of Removed Well | Hicap #
Lattitude / Longitude (Degrees and Minutes) | Method Code (see instructions)
¼ / ¼ | ¼ | Section | Township N | Range E W
or Gov't Lot #
Well Street Address
Well City, Village or Town | Well ZIP Code
Subdivision Name | Lot #
Reason For Removal From Service | Wt Unique Well # of Replacement Well

2. Facility / Owner Information
Facility Name
Facility ID (FID or PWS)
License/Permit/Monitoring #
Original Well Owner
Present Well Owner
Mailing Address of Present Owner
City of Present Owner | State | ZIP Code

3. Well / Drillhole / Borehole Information
☐ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole
Original Construction Date (mm/dd/yyyy)
If a Well Construction Report is available, please attach.
Construction Type: ☐ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):
Formation Type: ☐ Unconsolidated Formation ☐ Bedrock
Total Well Depth From Ground Surface (ft.) | Casing Diameter (in.)
Lower Drillhole Diameter (in.) | Casing Depth (ft.)
Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown
If yes, to what depth (feet)? | Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material
Pump and piping removed? ☐ Yes ☐ No ☐ N/A
Liner(s) removed? ☐ Yes ☐ No ☐ N/A
Screen removed? ☐ Yes ☐ No ☐ N/A
Casing left in place? ☐ Yes ☐ No ☐ N/A
Was casing cut off below surface? ☐ Yes ☐ No ☐ N/A
Did sealing material rise to surface? ☐ Yes ☐ No ☐ N/A
Did material settle after 24 hours? ☐ Yes ☐ No ☐ N/A
If yes, was hole retopped? ☐ Yes ☐ No ☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source? ☐ Yes ☐ No ☐ N/A
Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain):
Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " " ☐ Concrete ☐ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface			

6. Comments

7. Supervision of Work
Name of Person or Firm Doing Filling & Sealing | License # | Date of Filling & Sealing (mm/dd/yyyy)
Street or Route | Telephone Number ( )
City | State | ZIP Code | Signature of Person Doing Work | Date Signed

DNR Use Only
Date Received | Noted By
Comments

TEMPORARY ABANDONMENT

1. A well may be temporarily abandoned if it is planned to place the well back in service within a time specified by administrative rule.
2. Temporary abandonment is accomplished by threading or welding a watertight cover to the casing or by filling the well with a clean clay slurry and then placing a water tight cap or cover over the well.
3. If the well is not placed back into service, it should be permanently abandoned unless a written extension is granted by DNR.

GENERAL INSTRUCTIONS

Fill out a well abandonment form (3300-5) as completely as possible for each well or boring abandoned. Information should be provided for every box on the form where available. Sign each form. Please note that these forms are subject to change. (Personally identifiable information on these forms is not intended to be used for any other purpose.)

Verification Only of Fill and Seal: if you are only verifying that filling and sealing has previously occurred on a well and are NOT performing any filling and sealing work on the well, check the box near the top of the form. Complete Parts 1 and 2 of the form completely and any information you can provide in Parts 3, 4 and 5. You must provide comments in Part 6 as to the method used to varify both the filling and sealing of the well. Complete Part 7, excluding the date of Filling and Sealing. It will be implied that you did not do the filling and sealing work as stated in Part 7.

Route to: Return these forms to the project manager or plan reviewer for the DNR program who required the well abandonment. Check the appropriate routing box at the top of the forms to assure proper routing once the forms reach DNR.

If you do any work to fill or seal the well, you must complete this form as intended and do not check the Verification Only of Fill and Seal box.

(1) GENERAL INFORMATION

WI Unique Well No.: Fill in the 2 alphabetic and 3 numeric Wisconsin Unique Well Number (WUWN) of the well being abandoned. Check the well, sample tap in the house or the fuse box for a WUWN if one has been assigned to the well.

Common Well Name: Fill in common well name, such as House Well, Barn Well, Irrigation Well, B-ll, OW-13A, or MW-5R. (Use the suffix "R" for a replacement well.)

DNR Well ID No.: If available, enter the 3 digit number assigned to the well by the Department.

Public Land Survey Location of Well: Fill in the quarter quarter and quarter section, section, township, range and range direction of the well.

Gov. Lot Number: If applicable, provide the government lot number for the property. (Government lot numbers are the legal description of a tract of land adjacent to a lake or stream where a proper quarter or quarter quarter section corner could not be established.)

Grid Location: If available, provide the location of the well to the nearest foot, in relation to the grid origin established for the site. If the exact location of the well is designated in State Plane Coordinates, then leave these boxes blank.

Local Grid Origin or Well Location: If available, check the appropriate box behind the Local Grid Origin or the Well Location text. Locate the grid origin at a permanent feature near the waste or source of contamination. Give the location in State Plane Coordinates or Latitude and Longitude in degrees, minutes and seconds (using 1927 North American Datum). If State Plane Coordinates are used, circle the appropriate letter for south, central or north zone. Alternately, an acceptable method for providing this information without surveying is to locate the Grid Origin on a USGS 7.5 minute quadrangle map. The Location of the Grid Origin can then be interpolated (estimated) using standard cartographic techniques. If the Grid Origin location is estimated, check the estimated box.

The Well Location can be determined directly by surveying or by Global Positioning System (GPS) (with processing to be accurate within 1 foot and reported with precision to hundredths of a second). If the exact location of the well is given in State Plane Coordinates, then leave the Local Grid Location fields blank.

Reason For Abandonment: List the reason for well abandonment

WI Unique Well No. of Replacement Well: If applicable, enter the Wisconsin Unique Well Number of the well replacing this abandoned well.

(2) FACILITY / OWNER INFORMATION

Facility Name: If the well is located at a commercial or government, fill in the name of landfill, wastewater treatment facility, surface impoundment, spill or project.

Facility ID: Fill in the nine digits Facility ID (FID) assigned to the site by the Department.

License/Permit/Monitoring No.: Fill in number assigned to facility by the Department. If unknown, leave blank.

Street Address of the Well: Fill in the street address of the well being abandoned

City, Village, or Town Location: Fill in the city, village, or town name for the location of the well.

County Name: Fill in the name of the county the well being abandoned was located in.

Present Well Owner: Fill in the name, address, city, state, and zip code of the present owner.

Original Well Owner: Fill in the name of the original well owner, if known.

Street Address or Route of Owner: List the address of the present owner.

City, State, Zip Code: List the city, state, and zip code of the present owner.

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: Fill in the original date of construction for the well or boring.

Total Well Depth: Enter total depth of the well from ground surface.

Depth to Water: Enter depth to water from ground surface.

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL: Check only one box where Yes, No or Not Applicable is indicated. Check all boxes which apply otherwise.

(5) Material Used to Fill the Well/Drillhole: Enter the description of the filling material, the Depth From (starting from the surface), and the Depth To, circle one measurement unit (Yards, Sacks or Volume) and enter the amount or volume used, and enter the Mix Ratio or Mud Weight information (in pounds per gallon).

(6) Comments: Describe any of the above boxes in more detail or add information as required to describe the abandonment procedures.

(7) Name of Person or Firm Doing Sealing Work: Enter the name (first and last) or firm name, address, city, state, zip code, and phone number of the person who supervised the work.

Date of Abandonment: List Month/Day/Year (mm/dd/yyyy) the well was abandoned.

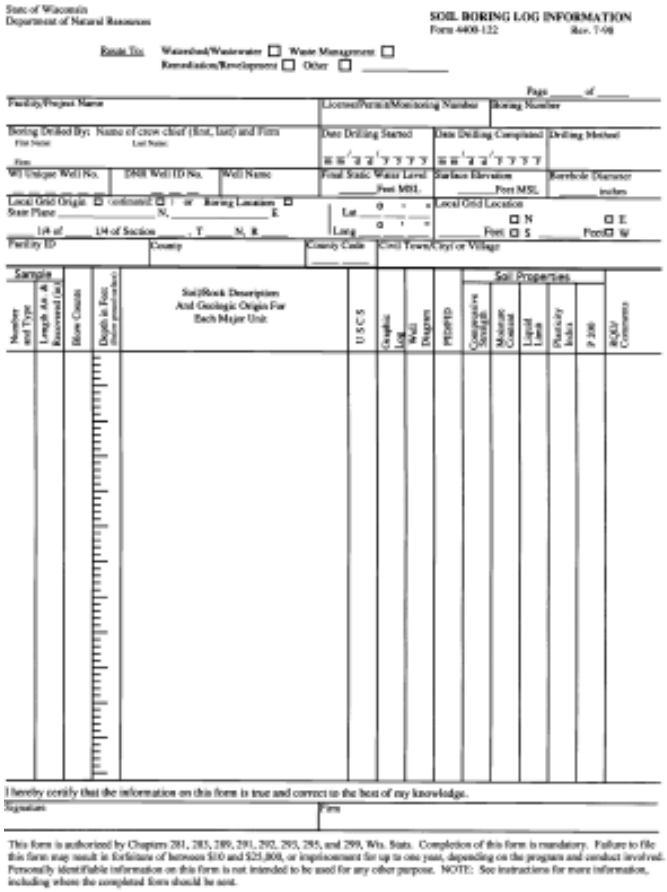
Signature of Person Doing Work: Sign the form by the person supervising or responsible for doing the work.

Date Signed: Date the form after the signature.

Soil Boring Log Information Forms
Form 4400-122, Form 4400-l22A

General Instructions:

Fill out a Soil Boring Log Information Form for every boring drilled. Be sure to indicate the page number and boring number in the blanks at the top of each page. All applicable portions of the Soil Boring Log Information Form must be properly completed. The form must be signed. Form 4400-122A must only be used as an attachment to form 4400-122.


State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

Page ____ of ____

Facility/Project Name | License/Permit/Monitoring Number | Boring Number

Boring Drilled By: Name of crew chief (first, last) and Firm | Date Drilling Started | Date Drilling Completed | Drilling Method

WI Unique Well No. | DNR Well ID No. | Well Name | Final Static Water Level | Surface Elevation | Borehole Diameter

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ | Local Grid Location

State Plane _____ N, _____ E | Lat ° ' " | ☐ N ☐ E

¼ of ¼ of Section ____, T ____ N, R ____ | Long ° ' " | Feet ☐ S Feet ☐ W

Facility ID | County | County Code | Civil Town/City or Village

Sample | Soil/Rock Description And Geologic Origin For Each Major Unit | USCS | Graphic Log / Well Diagram | PID/FID | Soil Properties | RQD/ Comments

Number and Type | Length Att. & Recovered (in) | Blow Counts | Depth in Feet | Compressive Strength | Moisture Content | Liquid Limit | Plasticity Index | P 200

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature | Firm

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Routing:

Return this form to the project manager or plan reviewer for the Department program that required the boring. If the project manager/plan reviewer is in a Regional Office, send the original to the Regional Office and a copy to the Central Office in Madison. If the project manager/plan reviewer is in the Central Office, send the original form there and a copy to the Regional Office. If your project does not have a project manager or plan reviewer or you do not know who it is, send the form to the appropriate program in the Central Office. Check the appropriate box at the top of the form to assure proper routing once the form reaches the Department.

Facility/Project Name: List the name of the landfill, wastewater treatment facility, surface impoundment, spill or project.

License/Permit/Monitoring Number: The number assigned by the Department to the facility where the boring was drilled. If unknown, leave blank.

Boring Number: The site boring number or name (e.g., B-1).

Boring Drilled By: The name (first and last) of the drilling crew chief and the drilling firm name.

Date Drilling Started: The date the boring was started in month/day/year (mm/dd/yyyy) format.

Date Drilling Completed: The date the boring was completed in month/day/year (mm/dd/yyyy) format.

Drilling Method: List drilling method used: solid stem auger, hollow stem auger, rotary (air or mud), reverse rotary, cable tool, wash boring, vibratory, etc.

Wisconsin Unique Well Number: If a well is to be set in the boring, fill in the Wisconsin Unique Well Number (WUWN) on this form. In addition, attach a WUWN tag to the inside of the protective cover pipe and record that number on the Monitoring Well Construction Form 4400-113A and Monitoring Well Development Form 4400-113B. WUWN tags are available from the DNR Central or Regional Offices.

DNR Well ID Number: The 3 digit number assigned to the well by the Department.

Well Name: If a well is constructed, fill in common well name, such as B-ll, OW-13A, or MW-5R. (Use the suffix "R" for a replacement well.)

Final Static Water Level: The static water level in the borehole in tenths (0.1) of feet above mean sea level prior to abandonment or well construction.

Surface Elevation: The surface elevation of the ground surface at the borehole in tenths (0.1) of feet above mean sea level referenced to the closest USGS benchmark.

Borehole Diameter: The diameter of the borehole in tenths (0.1) of inches.

Local Grid Origin or Boring Location: Check the appropriate box behind the Local Grid Origin or Boring Location text. Locate the grid origin at a permanent feature near the waste or source of contamination. Give the location in State Plane Coordinates or Latitude and Longitude in degrees, minutes and seconds (using 1927 North American Datum). If State Plane Coordinates are used, circle the appropriate letter for south, central, or north zone. Alternately, an acceptable method for providing this information without surveying is to locate the Grid Origin on a USGS 7.5 minute quadrangle map. The Location of the Grid Origin can then be interpolated (estimated) using standard cartographic techniques. If the Grid Origin location is estimated, check the estimated box.

The Boring Location can be determined directly by surveying or by Global Positioning System (GPS) (with processing to be accurate within 1 foot and reported with precision to hundredths of a second). If the exact location of the boring is given in State Plane Coordinates, leave the Local Grid Location fields blank.

Section Location of Waste/Source: Enter the quarter quarter section, quarter section, section, township, range and range direction.

Local Grid Location: The location of the boring to the nearest foot, in relation to the grid origin established for the site. If the exact location of the boring is given in State Plane Coordinates, then leave these fields blank.

Facility ID: Fill in the Facility ID (FID) assigned to the site.

County: The county in which the boring is located.

County Code: The two-digit Department county code. (The code is based alphabetically with Adams County 01 and Wood County 72 and can be found on the map included with the Monitoring Well Construction form instructions.)

Civil Town/City/or Village: The municipality in which the boring is located.

Sample Number: The number used to identify the sample. Indicate the type of sampling apparatus used (i.e. split spoon/ss, Shelby tube/st, grab/gs, piston sampler/ps, core/cs, cuttings/cu). Note the diameter of the sampler in Comments column.

Sample Length Attempted and Recovered: The length of sample attempted and the length of sample recovered reported in inches.

Blow Counts: The number of blow counts per specified length.

Depth: Indicate the depth (below ground surface) of sample collection and depth of any changes in the soil or rock type encountered, measured from below ground surface.

Soil/Rock Description and Geologic Origin: List visual characteristics of soil/rock noted during boring along with any pertinent descriptive remarks. Each major soil unit and bedrock formation shall be described using

both subsurface investigations and regional information. Indicate likely geologic origin and Munsell color of the material.

USCS: Indicate the Unified Soil Classification System classification of any unconsolidated units or rock type encountered during boring.

Graphic Log: Graphically illustrate soil/rock types encountered through the depth of boring and provide a key for the symbols used. Indicate the total depth of the boring on the log.

Well Diagram: Graphically show the well casing, well screen length(s), and the location of the top of the filter pack(s) if the boring is converted into a well.

PID/FID: Measurements performed on samples using a Photo-Ionization Detector or a Flame Ionization Detector. Indicate in the Comments column the type of detector and the method used.

Soil Properties:

Compressive Strength - Standard measurements in tons/ft. Indicate in the Comments column the type of test used.
Moisture Content - Laboratory measurements of percent moisture content.
Liquid Limit - Measurement in percent.
Plasticity Index - Measurement in percent.
P 200 - Measurement of percentage of soils smaller than the #200 sieve.

RQD/Comments: Where boring penetrates bedrock, indicate the Rock Quality Designation of the sample. Otherwise, place all comments or remarks in this column and the adjacent margin.

Soil Classification Codes

The following codes and symbols are from the Unified Soil Classification System (USCS). The section of additional codes and symbols was developed to cover additional materials or bedrock which may be encountered during the boring process.

Gravel and Gravelly Soils

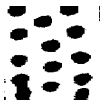
GP -Poorly graded gravels or gravel-sand mixtures, little of no fines 

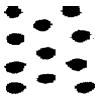
GW - Well graded gravels or gravel-sand mixtures, little or no fines 

GM - Silty gravels, gravel-sand-silt mixtures 

GC - Clayey gravels, gravel-sand-clay mixtures 

Sand and Sandy Soils

SW - Well graded sands or gravelly sands, little or no fines 

SP - Poorly graded sands or gravelly sands, little or no fines 

SM - Silty sands, sand-silt mixtures 

SC - Clayey sands, sand-clay mixtures 

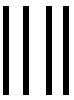
Silts and Clays - Liquid Limit is Less than 50

ML - Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity 

CL - Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, clean clays 

OL - Organic silts and organic silt-clays of low plasticity 

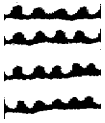
Silts and Clays - Liquid Limit is Greater than 50

MH - Inorganic silts, micaceous or diatomaceous fine sandy or silty soild, elastic silts 

CH - Inorganic clays of high plasticity, fat clays 

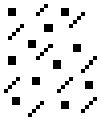
OH - Organic clays of medium to high plasticity, organic clays 

Organic Soils

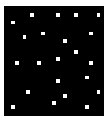
PT - Peat and other highly organic soils 

Additional Codes Added to cover other types of materials.

AL - Alluvium



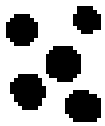
BA - Basalt



BE - Bedrock
or
BR - Bedrock

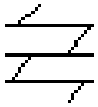
CO - Concrete

CG - Conglomerate

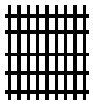


CR - Crystalline Rock

DO - Dolomite



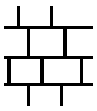
FI - Fill



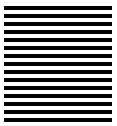
FS - Fossils

GR - Granite

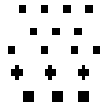
LI - Limestone
Or
LS - Limestone



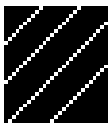
MD - Mudstone



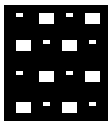
OT - Outwash



PA - Pavement

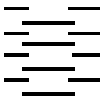


RE - Refuse

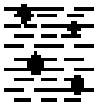


SA - Sandstone

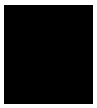
SH - Shale



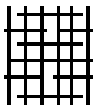
TI - Till



TO - Topsoil

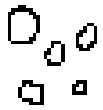


SI - Siltstone



VO - Void or Cave Loss

VU - Vugs



GROUNDWATER MONITORING WELL INFORMATION FORM 4400-89

This form, when completed provides a record of information for each well or sampling point that is part of a facility's groundwater monitoring program. It provides the facility or consultant with a means of presenting in a consistent format the well data which the department requires during a site review process. It should be updated as new wells are added to the monitoring program.

Each element of the form is described below. Complete the form with the necessary information, using the description of the elements as a guide.

Facility Name: The name of the site or landfill.

Facility ID Number: Fill in the nine digit Facility ID (FID) assigned to the site.

License/Permit/Monitoring Number: The number assigned by the Department to the facility. If unknown, leave blank.

Date: The date on which the form is filled out (mm/dd/yyyy).

Completed By: The name and firm of person completing the form.

WI Unique Well No: The Wisconsin Unique Well Number assigned to the well. These numbers are available from the Department and are to be assigned to all newly drilled wells.

Well Name: The common well name given to the well by the facility or consultant; e.g. MW-21 OW-5.

DNR Well ID Number: The 3 digit number assigned to the well by the Department, for use by the Department.

Well Location: The location of the well, measured in feet, in relation to a grid system origin established for the site or state plane coordinate system.

Dir: The location direction for the well relative to the grid origin. If state plane coordinates are used these should be N and E.

Date Established: The installation date of the well.

Well Casing Diam.: The inside diameter of the pipe used in the well construction, in inches.

Well Casing Type: The type of pipe used: plastic (P), steel (S), or other (0).

Elevations:

Top of Well Casing: The elevation, of the top of the well casing (not top of protectivepipe), in feet.

Ground Surface: The elevation, in feet, of the ground surface adjacent to the well.

Reference: Are elevations referenced to Mean Sea Level (MSL) or to a particular site datum established for the facility or site. Check one or the other.

Depths:

Screen Top: The depth, in feet, to the well screen top (subtract the screen length from the well depth).

Initial Groundwater: The depth, in feet, to the water level in the well before well development.

Well Depth: The total depth of the well from the top of well casing, measured in feet.

Screen Length: The length of the screen measured in feet.

Well Type: Record the type of well or sampling point code (number/initials) from the following list:

11/mw Water table observation well (monitoring well screen intersecting the water table) (non Subtitle D well)
12/pz Piezometer (monitoring well with screen sealed below the water table) (non Subtitle D well)
13/pw Private well - potable water supply
14/ly Lysimeter
16/rp Resistivity probe
17/gc Gradient control
18/at Aquifer test well
22/sw Surface water
23/lc Leachate collection system
24/lh Leachate head well
25/lg Leachate and Gas combo
26/ew Groundwater extraction well
27/he Horizontal groundwater extraction well
28/hw Horizontal monitoring well
29/ha Horizontal vapor extraction well
31/us Upstream
33/ds Downstream
36/sg Staff guage
51/gp Gas probe
53/ge Gas extraction well
55/gc Gas condensate
57/sv Soil venting wells (includes both soil vapor extraction and bioventing, includes both extraction and unsaturated zone gas phase injection wells installed in soil or fill, but not refuse
58/gm Gas sample monitoring point
61/ij Injection well (injection of liquids not gases)
62/as In situ air sparging well (injection well to inject gases into the aquifer

63/uv Unterdruck Verdampfer Brunnen (UVB) wells (sparging wells where the gases remain in the well and are not injected into the aquifer)
64/le Groundwater and light non-aqueous phase liquid (LNAPL) extraction wells
65/de Groundwater and dense non-aqueous phase liquid (DNAPL) extraction wells
66/ve Vacuum enhanced groundwater extraction wells
67/vi Vacuum enhanced groundwater and LNAPL extraction wells
68/vd Vacuum enhanced groundwater and DNAPL extraction wells
71/dw Subtitle D water table observation well (see 11/mw)
72/dp Subtitle D piezometer (see 12/pz)
80/mc Municipal water supply well: cities, villages, and sanitary districts
81/oc Community-other-than-municipal water supply well: mobile home parks, apartments, subdivisions, and condominium complexes
82/nn Noncommunity-Nontransient water supply well (schools, day care centers, and industries) A Noncommunity water system that regularly serves at least 25 of the same persons over 6 months per year
83/tn Noncommunity-Transient water supply well (motels, restaurants, parks, taverns, churches, and campgrounds) A Noncommunity water system that serves at least 25 people at least 60 days of the year
99/ot Other

Well Status: The status of the well using the following codes:

A -Actively monitored well
I -Inactive well (existing well not currently being monitored)
P -Permanently abandoned well
N -Potable well not currently used for consumption but actively monitored

Enf. Stds.: Check this box only if enforcement standards apply at this well. Enforcement standards apply at any well beyond the Design Management Zone or the property boundary of the facility or at a water supply well. For spills, enforcement standards apply at every point at which groundwater is monitored. (For more information, see s. NR 140.22, Wis. Adm. Code.)

Gradient: The location of the well in the groundwater flow system relative to the disposal site, spill, etc. Use one of the four letters designated below:

U = up gradient D = down gradient
S = side gradient N = not known

Distance to Waste: Distance Well Is From Waste/Source Boundary. Enter distance in feet from the monitoring well to the edge of a facility waste storage structure, e.g., from the edge of a wastewater lagoon or the approved waste fill boundary for a landfill. For a contaminant source which is not a facility, e.g., a spill, enter the distance the well is from the contaminant source.

Location Coordinates Are: State Plane Coordinate System, an established location system for Wisconsin or Local grid system, established for the site and submitted to the Department.

Grid Origin Location: Give the location in Latitude and Longitude in degrees, minutes and seconds using 1927 North American Datum or State Plane Coordinates. If State Plane Coordinates are used, circle the appropriate letter for south, central or north zone.

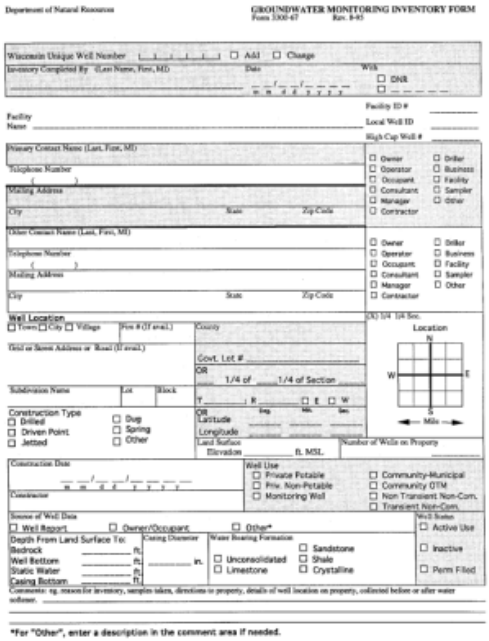
The Grid Origin can be determined by surveying or by Global Positioning System (GPS) (with processing to be accurate within 1 foot and reported with precision to hundredths (0.01) of a second). An acceptable method for providing this information without surveying is to locate the Grid Origin on a USGS 7.5 minute quadrangle

map. The Location of the Grid Origin can then be interpolated (estimated) using standard cartographic techniques. If the Grid Origin location is estimated, check the estimated box.

Remarks: Add any remarks to help clarify items listed above; e.g. MW-17 was abandoned on 1/24/90 and replaced by MW-17R; LHW-1 and LHW-2 are leachate head wells.

Groundwater Monitoring Inventory Form 3300-67

1. All wells sampled by DNR employees must be inventoried and assigned a Wisconsin Unique Well ID in the Departments data system. Use this form to create a new inventory record or to change an existing record for a well. Use a separate form for each well.



2. Mandatory fields are indicated by shadowing and MUST be completed or your form will not be entered into the computer system. Fill in all applicable portions of the form as completely as possible.

3. If the well is being inventoried for the first time, check the "add" box in the upper right comer of the form. If there is a change to existing information, check the "change" box in the upper right comer and then fill in the Wisconsin Unique Well Number and ONLY THE INFORMATION THAT NEEDS TO BE CHANGED. If the form is filled out by DNR staff, check the DNR box. If the person completing this inventory form is associated with another agency; fill in the agency acronym letters.

4. For a private will, the primary contact should be the well owner or the resident occupant of the property served by the well, if the owner or occupant is known.

5. Check only ONE contact type code box for each contact name. Check the one that is the most relevant if more than one applies. If the well owner is the occupant, check "Owner" as the contact type. Check the facility or business box ONLY if there is not person to contact.

6. Wells should be located as precisely as possible. If the well is located by Public Land Survey, record the T, R, S, 1/4 and 1/4 1/4 section. If the well is located by latitude and longitude, record the location to the nearest second. If the well is located in a government lot, record the latitude and longitude as well as the government lot number.

7. Check only ONE box in the Well Use section. If a spring is being inventoried, check Spring under Construction Type in addition to the well use box.

8. County Codes and Names:

1 . Adams	19. Florence	37. Marathon	55. Rusk
2. Ashland	20. Fond Du Lac	38. Marinette	56. St. Croix
3. Barron	21. Forest	39. Marquette	57. Sauk
4. Bayfield	22. Grant	40. Menominee	58. Sawyer
5. Brown	23. Green	41. Mlwaukee	59. Shawano
6. Buffalo	24. Green Lake	42. Monroe	60. Sheboygan
7. Burnett	25. Iowa	43. Oconto	61. Taylor
8. Calumet	26. Iron	44. Oneida	62. Trempealeau
9. Chippewa	27. Jackson	45. Outagamie	63. Vernon
10. Clark	28 Jefferson	46. Ozaukee	64. Vilas
11. Columbia	29. Juneau	47. Pepin	65. Walworth
12. Crawford	30. Kenosha	48. Pierce	66. Washburn
13. Dane	31. Kewaunee	49. Polk	67. Washington
14. Dodge	32. La Crosse	50. Portage	68. Waukesha
15. Door	33. Lafayene	51. Price	69. Waupaca
16. Douglas	34. Langlade	52. Racine	70. Waushara

17. Dunn	35. Lincoln	53. Richland	71. Winnebago
18. Eau Claire	36. Manitowoc	54. Rock	72. Wood

9. Return this form to the DNR Bureau of Water Supply, Box 7921, Madison, WI 53707, unless you are part of a special sampling program and have been instructed to return the form elsewhere.